

INDEX

Seventieth Quarto Volume—January 1, 1921, to June 30, 1921

AUTHORS

- Abrams, Duff A., 1440
 Aishton, R. H., 16, 1355
 Alexander, J. A., 400
 Allen, Oliver F., 879, 973, 1020, 1265
 Anthony, C. C., 1077
 Armstrong, A. H., 518
 Armstrong, G. W., 1157
 Arnold, Bion J., 1171
 Atterbury, W. W., 317
 Atwater, J. F., 380
- Balch, C. F., 290
 Balbridge, C. W., 1029
 Baldwin, Hadley, 584
 Basford, George M., 459, 1227
 Bast, P. E., 1271
 Beatty, E. W., 112
 Bibbins, J. R., 1169
 Bradford, C. T., 380
 Brinckerhoff, Frank M., 781
 Brinckerhoff, J. H., 1170
 Bristol, C. H., 839
 Brooke, G. D., 287
 Brown, A. P., 839
 Buell, D. C., 1272
 Bullard, Stanley H., 27
 Burch, Emmett H., 493
 Burns, G. F., 841
 Butterworth, E. T., 1202
 Byram, H. E., 1284
- Campbell, J. L., 582
 Canavan, Wm. F., 702
 Candler, G. L., 991
 Castle, O. C., 288
 Chambers, Edward, 1279
 Childe, C. E., 381
 Chiles, G. S., 1083
 Clark, Edgar E., 857
 Clark, J. C., 329, 719
 Cleary, A. J., 454
 Collett, Robert, 1275
 Colston, Col. W. A., 1403
 Conn, G. C., 841
 Cook, C. C., 1263
 Coss, J. L., 289, 542
 Coyle, P. W., 382
 Cummins, Albert B., 785
- Day, J. B., 1080, 1341
 Dean, F. W., 226
 De Boysson, M., 1237
 Downs, L. A., 582
 Dunn, Samuel O., 275, 1233, 1321, 1385
 Eldridge, J. L., 180
- Fay, Thornwell, 1202
 Force, H. J., 1439
 Ford, E. F., 1042
 Freeman, F. B., 732
- French, R. S., 1202
 Fritts, J. C., 293
- Gibson, Frank, 413
 Glisson, Harry B., 369
 Geemann, H. L., 494
 Grieg, G., 446
 Gutheim, A. G., 314
- Haig, M. H., 1073
 Hallinan, J. P., 471
 Hamilton, W. F. H., 227, 323, 455
 Hart, John, 400
 Hcath, E. H., 446
 Henderson, George R., 1037
 Hicks, P. R., 996
 Hitz, A. D., 1202
 Hoisington, C. W., 381, 1432
 Horough, B. T., 358
 Howard, Ernest E., 1393
 Humphrey, A. L., 25
 Hurley, J. B., 1234
- Insull, Samuel, 1342
- Jones, D. T., 1215
- Kelley, R. G., 1083
 Kinley, Dr. David, 688
 Koyl, C. H., 671
 Kreidler, R. G., 840
 Kruttschnitt, J., 17
- La Bach, Paul M., 247
 Lamont, R. P., 27
 Lang, P. G., Jr., 1433
 Latimer, James B., 703, 977
 Laughton, H. H., 1357
 Lec, E. H., 584
 Leigh, E. B., 28
 Linn, John H., 714
 Lisman, F. J., 1028
 Loree, L. F., 19, 1343
 Loweth, C. F., 585, 789
 Lyman, Alexander S., 833
 Lynn, Samuel, 563
- McAuliffe, Eugene, 1277
 Maas, E. F., 971
 Mantell, J. J., 473
 Markham, C. H., 19
 Mathews, T. W., 981
 Mercier, A. T., 841
 Meyer, B. H., 1345
 Moore, Stuart B., 1457
 Morf, F. Wm., 1202
 Morse, C. A., 583
- Nicholson, M., 368, 839
 Norman, Charles E., 552
- Parmelee, Julius H., 129, 377, 1079
 Payne, J. L., 109, 787, 883, 929
- Pearce, E. S., 1451
 Pearce, H. C., 180, 279, 1355.
 Peschaud, M., 122
 Phelps, W. E., 187
 Phillips, R. G., 1202
 Pilcher, John A., 923
 Plant, L. G., 1272
 Porter, L. B., 1165
 Poteet, R. W., 494
 Potter, A. A., 651
- Rea, Samuel, 1285
 Richardson, F. M., 1026
 Richardson, Marion B., 1384
 Riddell, Hon. William Renwick, 690
 Risque, John P., 181, 241, 283, 407, 465, 705, 835
 Ryan, N. A., 840
- Safford, H. R., 581, 613
 Salmon, W. W., 25
 Schaff, C. E., 18
 Schuler, Hans W., 1107
 Shaner, H., 1156
 Shaughnessy, E. H., 379, 972
 Shepard, F. H., 985, 1441
 Shields, J. D., 493
 Sisson, Francis H., 1464
 Slater, F. E., 840
 Smith, L. R., 368
 Snyder, H. W., 1023
 Sperry, Henry M., 1332
 Stevens, D. J., 290
 Stitt, H. E., 829
 Strong, J. B., 586
 Stuart, J. G., 1358
 Stuebing, A. F., 1161
 Sullivan, J. G., 583
 Symington, Charles J., 26
- Thayer, Robert E., 115
 Thompson, F. L., 586
 Tidwell, W. D., 1202
 Trimble, Robert, 584
 Tryon, F. G., 703
- Van Alstyne, David, 373, 985
 Vauchlain, Samuel M., 26
- Waddell, Dr. J. A. L., 1391
 Warfield, S. Davies, 793, 1448
 Whittaker, C. C., 838
 Whittenton, W. M., 113
 Whiter, E. T., 199
 Wickhorst, M. H., 983
 Willard, Daniel, 16, 427, 854
 Winburn, F. E., 703
 Wollner, William S., 1218
- Young, Hugh E., 1169

INDEX

Seventieth Quarto Volume—January 1, 1921, to June 30, 1921

AUTHORS

- Abrams, Duff A., 1440
 Aishton, R. H., 16, 1355
 Alexander, J. A., 400
 Allen, Oliver F., 879, 973, 1020, 1265
 Anthony, C. C., 1077
 Armstrong, A. H., 518
 Armstrong, G. W., 1157
 Arnold, Bion J., 1171
 Atterbury, W. W., 317
 Atwater, J. F., 380
- Balch, C. F., 290
 Balbridge, C. W., 1029
 Baldwin, Hadley, 584
 Basford, George M., 459, 1227
 Bast, P. E., 1271
 Beatty, E. W., 112
 Bibbins, J. R., 1169
 Bradford, C. T., 380
 Brinckerhoff, Frank M., 781
 Brinckerhoff, J. H., 1170
 Bristol, C. H., 839
 Brooke, G. D., 287
 Brown, A. P., 839
 Buell, D. C., 1272
 Bullard, Stanley H., 27
 Burch, Emmett H., 493
 Burns, G. F., 841
 Butterworth, E. T., 1202
 Byram, H. E., 1284
- Campbell, J. L., 582
 Canavan, Wm. F., 702
 Candler, G. L., 991
 Castle, O. C., 288
 Chambers, Edward, 1279
 Childe, C. E., 381
 Chiles, G. S., 1083
 Clark, Edgar E., 857
 Clark, J. C., 329, 719
 Cleary, A. J., 454
 Collett, Robert, 1275
 Colston, Col. W. A., 1403
 Conn, G. C., 841
 Cook, C. C., 1263
 Coss, J. L., 289, 542
 Coyle, P. W., 382
 Cummins, Albert B., 785
- Day, J. B., 1080, 1341
 Dean, F. W., 226
 De Boysson, M., 1237
 Downs, L. A., 582
 Dunn, Samuel O., 275, 1233, 1321, 1385
 Eldridge, J. L., 180
- Fay, Thornwell, 1202
 Force, H. J., 1439
 Ford, E. F., 1042
 Freeman, F. B., 732
- French, R. S., 1202
 Fritts, J. C., 293
- Gibson, Frank, 413
 Glisson, Harry B., 369
 Geemann, H. L., 494
 Grieg, G., 446
 Gutheim, A. G., 314
- Haig, M. H., 1073
 Hallinan, J. P., 471
 Hamilton, W. F. H., 227, 323, 455
 Hart, John, 400
 Hcath, E. H., 446
 Henderson, George R., 1037
 Hicks, P. R., 996
 Hitz, A. D., 1202
 Hoisington, C. W., 381, 1432
 Horough, B. T., 358
 Howard, Ernest E., 1393
 Humphrey, A. L., 25
 Hurley, J. B., 1234
- Insull, Samuel, 1342
- Jones, D. T., 1215
- Kelley, R. G., 1083
 Kinley, Dr. David, 688
 Koyl, C. H., 671
 Kreidler, R. G., 840
 Kruttschnitt, J., 17
- La Bach, Paul M., 247
 Lamont, R. P., 27
 Lang, P. G., Jr., 1433
 Latimer, James B., 703, 977
 Laughton, H. H., 1357
 Lec, E. H., 584
 Leigh, E. B., 28
 Linn, John H., 714
 Lisman, F. J., 1028
 Loree, L. F., 19, 1343
 Loweth, C. F., 585, 789
 Lyman, Alexander S., 833
 Lynn, Samuel, 563
- McAuliffe, Eugene, 1277
 Maas, E. F., 971
 Mantell, J. J., 473
 Markham, C. H., 19
 Mathews, T. W., 981
 Mercier, A. T., 841
 Meyer, B. H., 1345
 Moore, Stuart B., 1457
 Morf, F. Wm., 1202
 Morse, C. A., 583
- Nicholson, M., 368, 839
 Norman, Charles E., 552
- Parmelee, Julius H., 129, 377, 1079
 Payne, J. L., 109, 787, 883, 929
- Pearce, E. S., 1451
 Pearce, H. C., 180, 279, 1355.
 Peschaud, M., 122
 Phelps, W. E., 187
 Phillips, R. G., 1202
 Pilcher, John A., 923
 Plant, L. G., 1272
 Porter, L. B., 1165
 Poteet, R. W., 494
 Potter, A. A., 651
- Rea, Samuel, 1285
 Richardson, F. M., 1026
 Richardson, Marion B., 1384
 Riddell, Hon. William Renwick, 690
 Risque, John P., 181, 241, 283, 407, 465, 705, 835
 Ryan, N. A., 840
- Safford, H. R., 581, 613
 Salmon, W. W., 25
 Schaff, C. E., 18
 Schuler, Hans W., 1107
 Shaner, H., 1156
 Shaughnessy, E. H., 379, 972
 Shepard, F. H., 985, 1441
 Shields, J. D., 493
 Sisson, Francis H., 1464
 Slater, F. E., 840
 Smith, L. R., 368
 Snyder, H. W., 1023
 Sperry, Henry M., 1332
 Stevens, D. J., 290
 Stitt, H. E., 829
 Strong, J. B., 586
 Stuart, J. G., 1358
 Stuebing, A. F., 1161
 Sullivan, J. G., 583
 Symington, Charles J., 26
- Thayer, Robert E., 115
 Thompson, F. L., 586
 Tidwell, W. D., 1202
 Trimble, Robert, 584
 Tryon, F. G., 703
- Van Alstyne, David, 373, 985
 Vauchlain, Samuel M., 26
- Waddell, Dr. J. A. L., 1391
 Warfield, S. Davies, 793, 1448
 Whittaker, C. C., 838
 Whittenton, W. M., 113
 Whiter, E. T., 199
 Wickhorst, M. H., 983
 Willard, Daniel, 16, 427, 854
 Winburn, F. E., 703
 Wollner, William S., 1218
- Young, Hugh E., 1169

GENERAL INDEX

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

A

- Abandoned Lines During 1920, 151*
 Abermule Collision, 1427†, 1450
 Accidents (See also Safety First):
 Abermule, Wales, Collision, 1427†, 1450
 Baltimore & Ohio at Glenwood, 832
 Chicago, Milwaukee & St. Paul at Piedmont, 726
 Collision Problem and Automatic Train Control, 969†, 977
 Columbus & Greenville near Columbus, 1131
 Detroit United Railway near Ann Arbor, 1465
 Explosions, 416*, 847*, 919†, 1367
 Explosives, Report on, 1174
 Grade Crossing, 1253†
 I. C. C. Bulletin No. 76, 253; No. 77, 946
 I. C. C. Investigation Reports, 505
 New York Central-Michigan Central Collision at Porter, Ind., 495*, 539†, 568, 775†, 808*, 823†, 876†
 Norfolk & Western near Welch, 1418
 Pennsylvania at Edinburg, Ind., 1289
 Perth Amboy, N. J., Crossing, 1465
 Prevention Campaign: C. G. W., 302, 1418
 Pullman Car Fire; D. & R. G., 812
 Signal Lights, 1380
 Steel Railway Cars, Safety in, 781*
 Acid Tank Cars, 70-Ton, 203*, 400†
 Accounting (See also Railway Accounting Officers' Association):
 A. R. E. A. Definitions, 765
 Dictating Machines; N. Y. C., 775†, 797*
 Disbursement, 1354, 1405
 Earnings of Individual Trains, 965†, 981*
 Equalization Accounts, Rules Governing, 1438
 Fuel, 1276
 Maintenance Expenditures, 583, 1403
 Material, 1357
 Mechanical Devices in Offices, 775†, 797*, 965†, 981*, 1198†, 1215*
 Monthly Track Material Report, 766
 Short Lines' Methods, 1214
 Shortcomings, 1346
 Treated Ties, 1303†
 Additions and Betterments:
 Needs, 39*, 703†
 Programs for 1921, 29*
 Adequacy of Railway Maintenance, What Determines, 471
 Advertising, Community, 1171
 Agreement (See also Railroad Labor Board; also National; also Employee)
 Agreements, English Railway, 1189
 Agriculture (See American Railway Development Association)
 Air Brake:
 Tests with Automatic Straight; N. & W., 907
 Tests with Westinghouse; Virginian, 1199†, 1206*, 1407*
 Westinghouse Brakes in France, 571
 Air Brake Association: Executive Committee Meeting, 1082
 Air Consumption of Double-Capacity Brake; Virginian, 1407*
 Air Drill, Little Giant, 696*
 Aishton, R. H., President A. R. A., 58*
 Alabama & Vicksburg: Cross Tie, 45 Years from, 590
 Alabama, Tennessee & Northern: Passenger Fares Reduced, 907
 All-Steel (See Car, Freight)
 Alternating Current Power for Traction, 1427†, 1441*
 Almagamation Tribunal, English, 1199†, 1209
 Amendment of Valuation Act Proposed, 282, 1418
 American Association of Engineers:
 Meeting in Chicago, 591
 Officers Elected, 1183
 Salaries of Highway Engineers, 266†
 American Association of Traffic Officers: Officers Elected, 1243
 American Brake Shoe & Foundry Company: Annual Report, 863
 American Car & Foundry Company: General Chemical Tank Car, 203*, 400†
 American Committee on Land Transportation: International Equipment Association Proposed, 1458
 American Electric Railway Association: Heavy Electric Traction Program, 386
 American Engineering Council:
 Committee on Elimination of Waste, 436, 1367, 1380†
 Hoover, Herbert, Resigns, 1045
 American Institute of Banking: Sisson, F. H., on Reducing Rates, 1464
 American Iron & Steel Institute: Rail Production in 1920, 997
 American Locomotive Company:
 Annual Report, 573
 Mountain Type; C. R. I. & P., 447*
 American Locomotive in Belgium, 442†, 462
 American Newspaper Publishers' Association: F. H. Sisson on Reducing Rates, 1086
 American Railway Association (See also Car Service Division):
 Automatic Train Control Committee's Work, 590, 1330, 1467
 Automatic Train Control Inspectors, 1045
 Automatic Train Stop Committee's Report, 497
 Committee on Relations of Railway Operation to Legislation, 859
 Executive Committee, 386
 Freight Claim Division Convention, 1198†, 1231
 Freight Claim Division's Figures, 824†, 833
 Freight Station Section, 859
 Fuel Conservation Committee, 194
 Mechanical Division:
 Car Betterments in Interchange, 1102†
 Convention Abandoned, 535†, 567, 859, 873†
 Meeting in Chicago Postponed, 859, 1362
 Officers Elected, 207, 386
 Medical and Surgical Section:
 Annual Meeting, 1341
 Establishment of, 480
 Purchases and Stores Section:
 Meeting, Business, 1304†, 1355, 1397
 Report on Buildings and Structures, 1397
 Scrap Classification, 1398
 Signal Section:
 Meeting, Annual, 1303†, 1329
 Meeting, March, Cancelled, 577†
 Traffic Division, 436
 American Railway Development Association:
 Annual Meeting, 1129, 1151†, 1171
 American Railway Engineering Association:
 Address of President Safford, 609†, 613*, 826†
 Committee Chairmen, New, 609†
 Committee Personnel, Problem of, 609†, 614
 Convention in Chicago, 265†, 303, 441† (See also proceedings under this head)
 "Corresponding Members" of Committees, 826†
 Dinner, Annual, 688*
 Discussion of Reports, 743†
 Maintenance Settlement During Federal Control, Formula for Arriving at, 471
 Membership, Increase in, 610†, 614
 Officers Nominated, 208
 Officers, New, 693*
 Officers' Views on Railroad Problems, 581*
 Proceedings, 609†, 610†, 613*, 653*, 743†, 746*
 Purdue Alumni Luncheon, 695*
 Registration, 610†, 640, 694, 772
 Reminiscences of J. F. Wallace, 691
 Report on Ballast, 617*
 Report on Buildings, 750*
 Report on Conservation of Natural Resources, 767*
 Report on Economics of Railway Labor, 650†, 675*
 Report on Economics of Railway Location, 680*
 Report on Economics of Railway Operation, 649†, 679*
 Report on Electricity, 623*
 Report on Iron and Steel Structures, 650†, 653*
 Report on Masonry, 743†, 744†, 746*
 Report on Rail, 629*
 Report on Records and Accounts, 765*
 Report on Roadway, 752*
 Report on Rules and Organization, 763*
 Report on Shops and Locomotive Terminals, 684*
 Report on Signals and Interlocking, 627*
 Report on Signs, Fences and Crossings, 662*
 Report on Standardization, 686*
 Report on Stresses in Track, 639*
 Report on Ties, 650†, 658*
 Report on Track, 633*
 Report on Uniform General Contract Forms, 667*
 Report on Water Service, 670*
 Report on Wood Preservation, 744†, 759*
 Report on Wooden Bridges and Trestles, 743†, 756*
 Report on Yards and Terminals, 769*
 University and the Association, 651†, 688*
 Water Ashpits, 1101†
 American Railway Express Company:
 Service Improved, 1292
 Wage Reduction Asked For, 1437
 American Short Line Railroad Association:
 Activities Increased, 125
 Annual Meeting, 1164, 1213
 Court to Determine Status, 1213
 Organization, 126
 Purchasing Agency, Consolidated, 1213, 1401
 Wage Dispute, 846, 903, 1116
 American Society of Civil Engineers:
 Annual Meeting, 299
 New York Section, Officers of, 1243
 Vertical Lift Bridge, 1391*
 American Society of Mechanical Engineers:
 Advantages of Large Locomotives, 1161
 Forest Products Section, 302
 Locomotive Boiler Code, 947
 Locomotive Design, 1023, 1073, 1153†
 Terminal Problem, 1169
 American Society of Safety Engineers: Electrical Hazards and Their Safeguards, 1289
 American Society of Testing Materials: Annual Meeting, 1439
 American Steel Foundries:
 Annual Report, 738
 Lamont Truck, 401*, 729*
 American Wood Preservers' Association:
 Annual Convention, 321
 Marine Borers Invade Piling in San Francisco Bay, 399†, 420*
 Anchors (See Rail)
 Ann Arbor, Mich., Collision, 1465
 Annual Report (See names of companies; also Bureau)
 Anti-Friction Bearings on Swedish Rys., 971†
 Apprentice Training: A. T. & S. Fe., 699†, 714
 Appropriation:
 Interstate Commerce Commission, 386
 Post Office, 274, 387
 Valuation—Deficiency Bill, 480
 Argentina:
 British Railways in, 396†, 407*, 465*, 507*
 Freight Rates in, 1197†, 1245
 Locomotives, Standard Mikado, 722*
 Arkansas: Assessment for Highway Construction, 1420, 1428†, 1468
 Arkansas River—Colorado Floods, 1341*, 1399*
 Armstrong, A. H.: Advantages and Cost of Electrification, 518, 1037*
 Army Ordnance Association, Organization of, 1367
 Arouse Public—Crossing Accidents, 1253†
 Art of Working with Men, 965†, 1156†
 Asphalt Mastic, Texaco, 1181
 Ashpits, Water, 1101†
 Assessments for Highway Construction in Arkansas, 1420, 1428†, 1468
 Assigned Locomotives, 1240
 Association of Railway Claim Agents: Officers Elected, 1243
 Association of Railway Executives:
 Conferences with Unskilled Labor to Reduce Wages, 453, 549, 709
 Fruit and Vegetable Rates, 1468
 Labor Committee Abolished, 549
 Labor Committee, Report of, 443†, 451
 Legislation Urged to Require Payment of Guaranty, 233, 249
 Loan Fund, Recommendations as to, 96
 Meeting in Chicago, 434†, 451
 National Agreements—Telegram to President Wilson, 363
 National Agreements—Testimony Before Labor Board, 579, 723, 767†, 777†, 803, 845
 Rates, Building Material, 1090, 1365
 Repairs in Outside Shops, 176†, 184, 291, 301, 479, 984
 Resolutions on Labor Question, 443†, 453
 Senate Inquiry, 1002, 1102†, 1125
 Atchison, Topeka & Santa Fe:
 Annual Report, 1061†
 Apprentice Training, 699†, 714
 Car Loading Campaign, 320
 "Gospel of Appreciation, The," 476
 Rates for Transporting Soldiers, 1189
 Safety Drive of C. G. W., 1418
 Welfare Campaign Among Mexican Laborers, 1026
 Atlanta, Birmingham & Atlantic:
 Receivership, 520
 Valuation, 887
 Wages Reduced—Strike, 207, 319, 367, 411, 548, 710, 724, 811, 834, 1036 (Labor Board's Ruling), 1085
 Atlanta Passenger Traffic Club, 812
 Atterbury, W. W.: National Agreements, 312†, 317, 363, 397†, 805, 1153†, 1174, 1240
 Attitude of Investors Toward Securities, 53*
 Attitude of Railways Regarding Rates, 1382†
 Audible Signal (See Signaling)
 Australia: Railroad Notes, 257, 375
 Austria: Railroad Situation, 1142*
 Automatic Block (See Signaling)
 Automatic Control of Locomotive Cut-Off—Tests on C. C. C. & St. L., 1451*
 Automatic-Electric System in New York-New Jersey Port Development, 266†, 269†, 474
 Automatic Signal (See Signaling)
 Automatic Signal & Sign Company: Crossing Sign; C. M. & St. P., 1168*
 Automatic Stop (See Automatic Train Control)
 Automatic Straight Air Brake Tests; N. & W., 907
 Automatic Train Control:
 A. R. A. Joint Committee's Activities, 590, 1330, 1467
 Inspectors to Report on, 1045
 Latimer, J. B., on, 969†, 977
 New York Commission on, 497, 715

GENERAL INDEX—Continued

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

Automatic Train Control (Continued):

- Railway Business Association on, 851
- Regan System Exhibited in France, 565*
- Automatic Train Stop Committee's Report, 497
- Automobile:
 - Crossing Accidents, 1253†
 - Crossing Signs, 478*, 1168*
 - Drivers, Careful; B. & O., 1183
 - Traffic, 535†
- Average Revenue (See Revenues and Expenses)
- Aerial Mail Service, 480

B

- Bad Order Car (See Car Service)
- Baker Truck with Duplex Suspension, 850*
- Baldwin Locomotive Works:
 - Annual Report, 438
 - Consolidations; Western Maryland, 1117†
 - Havana, Three Types for, 897*
 - Mikados for Argentine State Rys., 722*
 - Pacific Type; Reid Newfoundland, 994*
 - Railroad from Baltic to Black Sea, 304
- Ballast, A. R. E. A. Report on, 617*
- Ballast Screen, Power, 606*
- Balliet, H. S.: Electrical Hazards and Their Safeguards, 1289
- Baltimore & Ohio:
 - Accident at Glenwood, W. Va., 832
 - Annual Report, 224†
 - Automobile Drivers, Careful, 1183
 - Bridge at Lawrenceburg, Ind., 509*
 - Business-Getting, 946
 - Coupler, Futrell Automatic, 516*
 - Mechanical Trimmers for Handling Coal at Curtis Bay Pier, 1433*
 - Piece Work Pay, Abolition of, 297
 - Safety Rallies, 253
 - Willard, Daniel, Before Senate Committee, 1175, 1197†
- Bangor & Aroostook: Freight Must Be Prepaid, 1465
- Baptism of Courage Wanted, 700†
- Barge Flooring, Texaco, Asphalt Mastic for; Pennsylvania, 1181*
- Barker, S. H.: Proposes Government Acquire Freight Cars, 1131
- Basculer Spans, 1392
- Base Car to Determine Cost of Reproduction New, 536†, 553*
- Beacon, T. H.: Claim Prevention, 895
- Bearings (See Car)
- Belgium:
 - Propaganda Against American Locomotives, 442†, 462
 - Railway Reconstruction in, 871†, 879*, 966†, 973*, 1013†, 1020*, 1265*
 - Wage Reductions, 1421
- Bell, M. L.: Rock Island's Guaranty, 234
- Belt-Line System in New York-New Jersey Port Development, 273*
- Benson, E. F.: Community Development Associations, 1130, 1151†
- Benson, W. S.: Re-establishment of Export and Import Rates Asked, 717
- Besler, W. G.: National Agreements, 901
- Bethlehem Steel Corporation: Annual Report, 820
- Bettering Train Movements by Telephone, 441†, 1019†
- Betterments (See Additions and Betterments)
- Bibbins, J. R., Manager of Department of Transportation and Communication, 907*
- Bikle, H. W.: Pennsylvania Locomotive Repairs, 1461
- Bill (See also Legislation): English Railway, 1199†, 1209, 1380†, 1470
- Bills in Congress, 1003, 1292
- Black Ten Damage Suits; L. V., 1367
- Board of Economics and Engineering, 1364, 1383†, 1449
- Board of Referees: Maintenance Claims May Be Considered, 94
- Boards of Adjustment, National, 79
- Block Signals (See Signaling)
- Boiler (See Locomotive)
- Boilers, Stationary, Inspection in Canada of, 733
- Bolivia: Railroad Notes, 1092
- Bond (See Finance)
- Bonus (See Employee—Wages)
- Booster (See Locomotive)
- Borers (See Marine)
- Boston & Albany: Lights, Flood, for Engine-houses, 732*
- Boston & Maine:
 - Annual Report, 1016†
 - Coal Rejected, 175†, 396†
 - Free Passes to Employees, 1002
 - Freight Claims—Thefts, 1138
 - Hustis, James H., Before New England Governors' Committee, 779†, 801
 - Station Agencies Cut Out, 735
 - Train Sheds Over Tracks of North Station, Boston, Removed, 1212*
- Boston Mayor (See Peters)
- Box Car (See Car, Freight)
- Box, "Four-One," 906*
- Boyer Rivet Set, 774*
- Brake (See also Air Brake):
 - Minich Safety Hand, 1464*

Brazil:

- Alcohol Locomotives, 1469
- Electric Locomotive; Paulista Ry., 1049*
- Electrification, 257
- Expense Budget for Railways, 1373
- Market for American Supplies, 823†, 835*
- Sao Paulo Railway, 697†, 705*, 835*
- Bridges and Buildings:
 - A. R. E. A. Report on, 743†, 750*, 756*
 - B. & O. Bridge at Lawrenceburg, 509*
 - Classification of, 750*, 778†, 789*
 - Columbia Bridge; P. & R., 369*
 - Engine for Movable Bridges, 647*
 - Harriman Bridge at Portland, 1394*
 - Light in Railway Buildings, 543*, 603*, 1303†, 1325*
 - Movable Bridge Spans, 1391*
 - Mystic River Bridge; N. Y., N. H. & H., 711*
 - Paint Test; P. & L. E., 561*
 - Painting Schedule, Keep Up the, 823†
 - Painting, Spray, 601*
 - Rating Old Bridges, 650†, 654, 789*
 - Reconstruction in France and Belgium, 871†, 879*, 966†, 973*, 1013†, 1020*
 - Report of A. R. E. A. on Iron and Steel Structures, 650†, 653*
 - Report of Purchases and Stores Section on Buildings and Structures, 1397
 - Terminal Buildings, Design of, 829*
- Brief (See Mandamus)
- Brill, J. G., Co.: Motor Omnibus, 1363*
- Brisbane, Arthur: Charges Against Railway Officers, 700†
- Britain (See Great Britain)
- British Railways in Argentina, 396†, 407*, 465*, 507*
- Brock, G. E.: Regional Boards Urged, 932
- Brotherhood Leaders Confer with Security Owners, 904, 928
- Brotherhood of Railroad Trainmen: Wise Course for Labor Leaders, 1138
- Brown Portable Conveyor for Railway Water Terminal at Alton, Ill., 522*
- Brownhoist Locomotive Crane, 1130*
- Brown's Discipline on Canadian Pacific, 396†
- Buckeye Six-Wheel Truck, 405*, 1269*
- Bucyrus Company: Annual Report, 572
- Budgets for 1921, 29*
- Buffalo, Rochester & Pittsburgh: Annual Report, 1250
- Bugg, Colonel: A. B. & A. Wage Situation, 367
- Building (See Bridges and Buildings)
- Building Material Rates to Stand, 1090, 1365
- Buildings and Structures, Report of Purchases and Stores Section on, 1397
- Bixler, H. C., Transportation Engineer for Port of New York Authority, 1366
- Bulgaria: Locomotives from Italy, 1049
- Bureau of Explosives: Annual Report, 1175
- Bureau of Foreign and Domestic Commerce (See Department of Commerce)
- Bureau of Labor Statistics:
 - Payroll of Car Building Plants in January, 1921, 484
 - Wages and the Cost of Living, 700†
- Bureau of Markets: Fruit and Vegetable Shipments, 1402, 1468
- Bureau of Railway Economics:
 - Average Revenue per Ton and per Passenger per Mile, 1090
 - Distribution of the Railway Dollar, 807
 - Freight Car Performance in December, 468
 - Funded Debt Maturing 1920-1949, 368
 - Loss and Damage Payments, 702†
 - Mileage of the World, 367
 - Prices Higher Than Freight Rates, 994
 - Purchases in 1920, 1304†
 - Revenues and Expenses in December, 467
 - Statistics of Class I Railways, 1911-1916, 1332
 - Trend of Railway Earnings, 1332*
- Bureau of Safety (See Interstate Commerce Commission)
- Bureau of Standards: Rails from Sink-Head and Ordinary Ingots Compared, 333*
- Bureau of the Census: Car Building in 1919 and 1914, 1246
- Bush, S. P.: Stability of Purchases, 852
- Business:
 - Bad Freight Car Situation, 1255†, 1304†
 - "Buy Now—Ship Now," 1†, 9*, 16*, 23*, 25*, 1197†
 - Coal Industry, 841
 - Decline, 445†, 577†, 941*, 965†, 1224, 1279
 - Plans for the Future, 744†
 - Purchases and Stores Division Meeting, 1304†, 1355
 - Purchasing Power of the Farmers, 491†
 - Relation of Railroad Purchases, 38*, 180†
 - Service of Supply, The, 268†, 279
 - Shipper, See the, 965†, 1156†
 - Signs of Improving Conditions, 1013†, 1027
 - Soliciting; B. & O., 946
- Buy Coal Now, 841, 1112
- "Buy Now," 1†, 23*, 25*
- Buyer's Market, A, 1197†

Byram, H. E.:

- National Agreements, 901
- Testimony Before Senate Committee, 1284

C

- Calculator, "Small" Pocket, 774*
- California Bankers' Association: Shoup, Paul, on Taxation, 1367
- Callahan, P. H.: Advice to Labor, 1138
- Cambrian Railways: Abermule Collision, 1427†, 1450
- Canada:
 - Carvell, Hon. F. B., on Reducing Rates, 1132
 - Coal Traffic, 862
 - Exchange Surcharge on U. S. Shipments, 250
 - Inspection of Stationary Boilers, 733
 - Loss from Government Railways, 883, 918†, 929
 - Passenger Fares Reduced, 1467
 - Railway Developments During 1920, 109*
 - Rates, Problem of, 112
 - Riddell, Hon. W. R., on, 690
 - Wages, J. L. Payne on, 787
- Canadian Locomotive Company: Heavy Switchers; Grand Trunk, 338*
- Canadian National Railways: Operation by C. P. R. Proposed, 1069
- Canadian Pacific:
 - Agricultural Development, 1172
 - Annual Report, 826†, 867
 - Brown's Discipline, 396†
 - Lord Shaughnessy Proposes C. P. R. Operate Canadian National, 1069
 - Track Scale Floor, Weatherproof, 645*
- Canadian Railway Club:
 - Hall, Grant, on Subjects Presented, 777†
 - Repair and Maintenance of Steel Freight Cars, 563, 698†
- Canopy Sheds; Boston & Maine, 1212*
- Canton Culvert & Silo Company: Reinforced End for Imperial Culvert, 602*
- Cape Cod Canal, 1411
- Capital and Labor's Return from Railway Earnings, 1381†
- Capitalization of Surplus (See Chicago, Burlington & Quincy; also Delaware, Lackawanna & Western)
- Car:
 - Bearings, Anti-Friction, in Sweden, 971†
 - Brake (See Air Brake)
 - Connector, Futrell Automatic, 516*
 - Dumping Machine at Sewall's Point Pier; Virginian, 1207*
 - Exports (See Foreign Trade)
 - Inspection, Kalamazoo Motor, 602*
 - Inspection on the Interborough, 1370
 - Motor (See Motor Cars)
 - Motor Omnibus and Trailer, 1363*
 - Needs, 47*
 - Ownership, March 31, 1921, 1328
 - Prices, 87*
 - Seat, Smolar, 566*
 - Steel Cars, Safety of, 781*
 - Weed Burning Outfit; T. & P., 1033*
 - Weed Killing—Sprinkling Unit, 607*
 - Wheels, Failures of, 1439
- Car Building in 1919 and 1914, 1246
- Car Conditions (See Car Service)
- Car Deliveries (See Car Service)
- Car, Freight:
 - Brake, Minich Safety Hand, 1464*
 - Coal, 100-Ton; N. & W., 917†, 923*
 - Coal, 120-ton; Virginian, 401*, 556, 729*, 1199†, 1203* (test train run), 1269* (buckeye trucks), 1407* (double capacity brake)
 - Coal Cars, Large, 568
 - Container Car; N. Y. C., 315* (express), 355†, 905* (l. c. l. freight), 1128*
 - Cost of Reproduction New of All-Steel Freight Cars, 536†, 553*
 - Ownership, March 31, 1921, 1328
 - Refrigerator Cars, Don't Neglect, 493†
 - Refrigerator Car, Shock Absorber for, 340
 - Repair and Maintenance of, 563, 698†
 - Specialties for All-Steel, 554
 - Steam Heated, for Perishables, 946
 - Structural Improvement of, 917†
 - Tank, 70-Ton Acid, 203*, 400†
 - Truck, Lamont, 401*, 729*
 - Unloader, Tilting Cradle, 999*
 - Virginian, Types on, 1204
- Carload Shipments of Fruits and Vegetables, 1402, 1468
- Car Loading (See Car Service)
- Car Repairs (See Car Service)
- Car Repair Shop at Lafayette; C. I. & L., 1303†, 1325*
- Car Seat, Smolar, 566*
- Car Service:
 - Bad Car Conditions, Penalty of, 699†
 - Bad Car Situation, 1255†, 1304†
 - Car Mileage, Increasing, 368
 - Conditions Need Permanent Improvement, 1314*
 - Conditions—Three Difficulties, 409†
 - Coal Car Distribution Rules, Investigation of, 816

Car Service (Continued):

Deliveries in January, 737; February, 871†, 910; March, 1093; April, 1294
 Freight Cars, Present Condition of, 293
 Increasing Car Mileage, 368
 Interchange, Car Betterments in, 1102†
 Loading Bureau Suggested, 290
 Loading Campaign, A. T. & S. Fe, 320
 Loading, Contest on Increasing, 287, 379, 839
 Loading in 1920; Virginian, 1207
 Loading, January, 1918, to Date, 941*
 Loading, Maximum, Views on, 494†
 Loading, Weekly Reports of, 114, 206, 246, 286, 311†, 331, 357†, 384, 410, 458, 514, 556, 698†, 731, 799, 848, 896, 943, 944, 998, 1013†, 1027, 1072, 1116, 1181, 1214, 1268, 1338, 1401, 1456
 Maintenance, 563, 698†, 699†, 1316
 Refrigerator Car Business, 493†
 Repairs, Fixed Prices for, 490†
 Repairs on a Business Basis, 775†
 Repairs, Outside, 176†, 184, 291, 301, 479, 984, 1225
 Surpluses and Shortages, 47*, 68, 942* (See also Loading, Weekly Reports under this head)
 Car Service Division of A. R. A.:
 Equipment Report, Quarterly, 1328
 Freight Car Loadings, Weekly Reports of (See Car Service—Loading)
 Grain Handling, Preparation for, 1268
 Car Shortage Imminent, Is a, 1304†
 Car Shortage Situation in 1920, 47*, 68, 942*
 Carbic Model M Lamp, 601*
 Carvell, Hon. F. B., on Reducing Rates, 1132
 Cash Fare Penalty; Pennsylvania, 946
 Castle, O. C.: Claim Prevention, 1466
 Catechism, Railway Income, 557
 Catechism, Safety-First, 358†, 442†
 Cattle Raising in Georgia, 1371
 Central of Georgia:
 Cattle Raising, 1371
 Freight Claim Reduction, 991
 Central of New Jersey:
 Accident, Perth Amboy Crossing, 1465
 Sale of Stock—Reading Dissolution Plan, 425†, 443†, 535†, 1197†
 Central Railway Club: Modern Engine Terminals, 829*
 Central Wages Board, English, 1199†, 1210
 Centralized Production Departments, 1319
 Chairman Clark (See Clark, Edgar E.)
 Chamber of Commerce of the State of New York: Loree's, L. F. Proposal Regarding Labor, 387
 Chamber of Commerce of the United States: Committee to Co-operate with Secretary of Commerce Hoover, 1001
 Hoover, Herbert, on Reducing Rates, 1058†
 Railroad Regulation, Resolutions on, 1087
 Report of Committee on Railroads, 1039
 Chambers, Edward: Testimony Before Senate Committee, 1279
 Chart, Rail Section, 599*
 Charts (See Trend Curves)
 Chesapeake & Ohio:
 Piece Work Pay, Abolition of, 297
 Motor Omnibus, 1363*
 Chicago:
 Graft in Railroad Construction, 946
 Terminal Plans, 891*, 1169
 Chicago & Alton:
 Robbery of the "Hummer," 567
 "Spirit of Safety First," 536†, 552
 Chicago & North Western:
 Annual Report, 1256†, 1298
 Bridge Disaster at Whitney, 1466
 Explosion Wrecks Grain Elevator, 847*
 Richards, R. C., Presentation to, 253
 Safety First Record, 1038
 Chicago, Burlington & Quincy:
 Capitalization of Surplus—Great Northern-Northern Pacific Bond Issue, 417, 499, 837, 940, 1031
 Crossing, Steel Plate Highway, 608*
 Chicago Great Western:
 Accident Prevention Campaign, 302, 1418
 Annual Report, 970†*
 Compliments of the Santa Fe, 1418
 Chicago, Indianapolis & Louisville: Car Repair Shop at Lafayette, 1303†, 1325*
 Chicago Junction: New York Central Proposes Lease, 32, 1086, 1131, 1186
 Chicago, Milwaukee & St. Paul:
 Accident at Piedmont, Mont., 726
 Annual Report, 1306†
 Byram, H. E., on Results, 1284
 Classification of Old Bridges, 778†, 789*
 Crossing Sign, 1168*
 Electrification, 101*, 228*, 323*, 455*, 518 (cost), 1037*
 Employees Purchase Stocks, 1085
 Helpers in Electric Train Operation, 455*
 Water Softening Plant at Yankton, 598*
 Chicago Pneumatic Tool Company:
 Air Drill, Little Giant, 696*
 Boyer Rivet Set, 774*
 Engine, Giant Fuel Oil, 605*
 Chicago Railway Equipment Company: Annual Report, 820
 Chicago, Rock Island & Pacific:
 Annual Report, 919†*
 Bell, M. L., on Guaranty Situation, 234
 Consolidation of Operating Divisions, 1013†

Chicago, Rock Island & Pacific (Continued):

Locomotives, Mountain Type, 447*
 Loss and Damage, Reducing, 895
 Telegraph Department, 1101†
 War Gardens Continued, 812
 Water Treatment, Results of, 247*
 Chicago, St. Paul, Minneapolis & Omaha: Annual Report, 1256†*
 Chicago, Terre Haute & Southeastern: Valuation, 1366
 Chicago Traffic Club: Officers, 954
 Chihuahua, New Line in, 1373
 Chile:
 Britain Scores, 1253†, 1293†
 Electrification, 346, 818, 1293
 European Bids on Materials, 1141
 Loan, 266†, 395†
 Nitrate Railways, Earnings of, 1421
 Risque, J. P., on Railways, 181*, 222†, 241*, 266†, 283*
 China:
 Famine—Railways Needed, 395†
 Railroad Notes, 304, 346, 528, 818, 1005, 1141, 1189
 Robbins, F. S., Appointment of, 1245
 Chipman Chemical Engineering Company: Weed-Killing Equipment, 607*
 Cinder Plant, "Rand S", 607*, 644*, 646*
 Circulars Should Elicit Intelligent Responses, 442†
 Civic Development Plan (See Chicago)
 Claims (See also Freight Claims):
 English Railways, Payments to, 1209
 Loss and Damage (See Freight Claims)
 Overcharge, 528, 1405
 Overcharge; N. C. & St. L., 1290
 Settlements with Railroad Administration, 73, 1120, 1328, 1466
 Clam Shell Transportation, Regulation of, 489†
 Clark, Edgar E.:
 Chairman of I. C. C., 128*
 Honorary Degree, 1465
 New Problems of Management, 857
 Partial Payments of Guaranty, 235
 Rate Reductions, 546, 858, 936, 979, 1042, 1436
 Re-elected Chairman, 1466
 Train Control Devices, R. B. A. on, 852
 Clark's Gap, Coal Moved Over, 1205
 Classification at the Initial Terminal, 493†
 Classification of:
 Bridges, 778†, 789*
 Buildings, 750*
 Employees, 1173, 1223, 1288, 1411, 1459
 (Labor Board's Rules)
 Material, 1356
 Scrap, 1398
 Clayton Law—Section 10 Effective, 121, 178†, 191, 208, 231, 250
 Cleaning Engines, 1314
 Clerks, National Agreements for, 519, 876†
 Cleveland, Cincinnati, Chicago & St. Louis:
 Automatic Control of Locomotive Cut-off, 1451*
 Cleveland Passenger Terminal Planned, 498
 Coal (See also Fuel):
 Buy Now, 841, 1112
 Canada, Production in, 862
 Commercial Stocks April 1, 1084
 Cost in 1920, 980†, 1304†
 Crisis on the Way, Another, 537†
 Depression Analyzed, 841
 Distribution, 1271
 Exports, 1197†
 Mechanical Trimmers at Curtis Bay Pier; B. & O., 1433*
 Norfolk & Western, Fields on, 874†*
 Prospective Traffic in 1921, 11
 Rates, Lake Cargo, Reduced, 1089
 Rejecting Unfit Coal, 175†, 395†
 Seasonal Rate Bill, 1159, 1467
 Senator Elkins Urges Public to Buy, 1112
 Stabilization Bill, 1160
 Storage, 1236
 Survey of Stocks on April 1, 908
 Virginian Railway's Business, 1197†, 1199†, 1203*
 Coal Car (See Car, Freight; also Car Service)
 Coaling Station Hoist, Howlett Automatic, 603*
 Coaling Station, "Rand S.", 607*, 644*, 646*
 Coaling System, Godfrey, 648*
 Coast Lines (See Atchison, Topeka & Santa Fe)
 Collective Bargaining (See also Railroad Labor Board—National Agreements), 443†, 451
 College Men, Do the Railroads Want, 1384†
 Colleges Confer Honorary Degrees, 1465
 Collision (See Accident)
 Colorado Floods, 1341*, 1399*, 1427†
 Columbia Bridge; P. & R., 369*
 Columbus & Greenville: Accident near Columbus, Miss., 1131
 "Commerce Reports"—Red Tape, 1151†
 Commercial Stocks of Coal, 1084
 Commission Merchants' Attacks on Freight Rates, 967†, 1199†, 1201†
 "Commissioners of the Port Authority," 1001
 Committee (See also names of associations):
 Elimination of Waste, 436, 1367, 1380†
 Committee on Relations of Railway Operation to Legislation, 859
 Commodity Prices and Freight Rates, 697, 967†, 979, 1127
 Community Development Associations, 1130, 1151†, 1171
 Commutation Tickets, Misuse of; L. I., 1131
 Compensation (See Employee—Wages)

Compensation Contracts:

Grand Trunk Western, Mandamus Denied to, 208, 249, 1366
 Guaranty, Payment of, 5†, 61, 193, 208, 233, 249, 277, 326, 383, 477, 491†, 513 (Winslow Bill Signed), 565, 718, 812, 1285
 Maintenance Claims, 94, 1395, 1403
 Settlements with Railroad Administration, 73, 1120, 1328, 1466
 Competitive Bidding Under Clayton Law, Regulations for, 231
 Compliments of Santa Fe to C. G. W., 1418
 Concrete:
 Design, Little Progress in, 489†
 Report of A. R. E. A., 743†, 744†, 746*
 Waterproofing, 1151†
 Wear Tests, 1440
 Conduit Construction, Underground, 625
 Conference (See Employee: Wages—Reductions)
 Congress (See Senate; also House):
 President Urges Reduction of Transportation Costs, 931
 Railroad Bills, 1003, 1292
 Senator La Follette Wants Information, 479
 Connector, Futrell Automatic, 516*
 Conservation (See also Fuel)
 Conservation of Natural Resources, 767*
 Consolidated Purchasing Agency, Short Line, 1213, 1401
 Conservation Commission, A, 175†
 Consolidation:
 English Railways, 1199†, 1209
 New England Roads, 355†, 386
 Operating Divisions, 1013†
 U. S. Chamber of Commerce on, 1040
 Consolidation Locomotive (See Locomotive)
 Constitutionality of Transportation Act, States Attack, 470, 511
 Construction Material Interests Ask Reduction in Freight Rates, 1090, 1365
 Construction, New (See also Bridges and Buildings; also Shops; also Station; also Yards; also Engine Terminals; also Yards and Terminals):
 Mileage Built in 1920, 153*
 Permanence, 1254†
 Reconstruction in France and Belgium, 871†, 879*, 966†, 973*, 1013†, 1020†, 1265*
 Container Car, Express; N. Y. C., 315*, 355†, 1128*
 Container Car, L. C. L. Freight; N. Y. C., 905*
 Container—"Four-One" Box, 906*
 Container System for Port of New York, 441†, 474
 Contest:
 Increasing Car Mileage, 368
 Increasing the Car Load, 287, 379, 839
 Contract Forms, A. R. E. A. Report on, 667*
 Contracts: Importance of Intelligent Inspection, 446†
 Convention (See American Railway Association; also names of associations)
 Conveyor:
 Brown, at Alton, Ill., 522*
 Godfrey, 648*
 Roberts & Schaefer, 646*
 Co-operation with Manufacturers, 701†
 Cooper's Class E Loading, 778†, 789*
 Co-ordinating Motor Trucks with Railroads, 1427†, 1457
 Correspondence Filing, Grant Gibson on, 413*
 "Corresponding Members" of A. R. E. A. Committees, 826†
 Cost (See also Prices):
 Buildings, Trend Curve for, 750*
 Chicago Terminal Plans, 894
 Electric Operation, 518, 624
 Electrification, 518, 727, 1037*
 Fuel in 1920, 980, 1304†
 Full Crew Law in Indiana, 479
 Labor and Material, 1102†, 1126
 Maintaining Freight Cars, 1317
 Pneumatic Tie Tamping; D. L. & W., 721
 Repairs to Equipment, 185
 Reproduction New of All-Steel Freight Cars, 536†, 553*
 Train Operation in January, 1086; February, 1183; March, 1411
 Train Stops, 1432†
 Transportation in Relation to Other Cost Factors, 1079
 Cost of Living and Railway Wages, 700†, 1040, 1201†, 1336, 1429†
 Cost of Living, Decline in, 1243
 "Cotton, Exposed" and Claims, 1432†
 County, A. J.: Prompt Settlements Urged, 1243
 Courage Needed by Railway Officers, 700†
 Court News (See Legal Decisions)
 Courtesy of Employees; M. & St. L., 459
 Cowie, R. E. M.: Express Service Improved, 1292
 Cradle Unloader for Box Cars, 999*
 Crane and Trucking Facilities, 1320, 1380†
 Crane Boiler, Locomotive, 1183*
 Crane, Brownhoist Locomotive, 1130*
 Crane Company: Annual Report, 1052
 Crane, Gap, 521*
 Crane, Locomotive Type, 646*
 Criminal Law Bureaus Proposed, 824†, 833
 Cross Tie (See Ties and Timber)
 Crossing (See also Grade Crossings):
 Automatic Signal Arrangement, 1165*
 Gages and Flangeways, 636

GENERAL INDEX—Continued

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

Crossing (See also Grade Crossing)—(Continued):
Kreolite Crossings, 606*
Report of A. R. E. A. on, 662*
Signs, 478*, 1168*
Steel Plate Highway; C. B. & Q., 608*

Cross Tie (See Ties)
Crown Sheet Failure, A, 885*
Cuba: Locomotives for Havana Ry., 897*
Culvert Pipe with Reinforced Ends, 602*
Cummins (See Senator Cummins)
Curtis Bay Pier, Mechanical Trimmers for Handling Coal at; B. & O., 1433*
Curves: Easement, Use of, 917†, 933*
Cut-Off, Locomotive, Automatic Control of; Tests on C. C. C. & St. L., 1451*
Cut Track Spike, 633*
Cutler-Monesmith Shock Absorber, 340*
Cuyler, Thomas De Witt (See also Association of Railway Executives):
Partial Payments of Guaranty, 233
President Declines Employees' Requests, 363
Repairs in Outside Shops, 186, 291, 301, 479, 984
Senate Investigation, 1125
Testimonial to, 255

D

Dallas Traffic Club: Officers, 1243
Dates, Important, 1334
Davis, James C. (See Director General)
Davis Type Flood Lights; B. & A., 732*
Daylight Saving, 815, 859
Dayton Car Seat & Manufacturing Company:
Smolar Car Seat, 566*
Decision (See Railroad Labor Board)
Decision on National Agreements (See Railroad Labor Board)
Decreases (See Decision)
Deficiency Appropriation for Valuation, 480
Deficit (See also Revenues and Expenses):
Canadian Railway, 883
Delaware & Hudson:
Annual Report, 1146, 1154†*
Fuel Conservation, 843*
Loree, L. F., Answers Lauck's Charges, 1139
Safety First, J. T. Loree on, 175†
Delaware, Lackawanna & Western:
Annual Report 1430†*
Capitalization of Surplus—Stock Dividend Authorized, 417, 995
Test to Determine Cost of Pneumatic Tie Tamping, 721
Delays to Passenger Trains, 175†
Denver & Rio Grande: Pullman Car Accident, 812
Denver, Boulder & Western, Peculiar Position of, 1080*
Department of Commerce (See also Hoover, Herbert):
Chamber of Commerce Appoints Committee to Co-operate with, 1001
Red Tape, 1151†
Reorganization of, 556, 699†, 707
Department of Transportation and Communication: Bibbins, J. R., Manager, 907*
Department of Transportation Proposed, 707
Depression (See Business)
Derailment (See Accidents)
Design:
Locomotives, Large, 1023, 1073, 1153†
New—The Acid Test, 776†
Terminal Buildings, Modern, 829*
Development of Port (See Port)
Developments During 1920, 59*
Detroit Steel Products Company: Fenestra Window Sash in Pere Marquette Roundhouse, 603*, 645
Detroit, Toledo & Ironton:
Wages Raised by Henry Ford, 1367
Development (See also American Railway Development Association):
Port of New York, 1103†, 1198†
De Vilbiss Company: Spray Painting Equipment, 601*
Diagrams, Use of, 1344
Dictating Machines; N. Y. C., 775†, 797*
Director General Davis (See also Government Control; also United States Railroad Administration):
Appointment, 862
Loss from Railroad Operation, 1120, 1179
Disbursement Accounts, Report on, 1354, 1405
Disc Bearings for Passenger Cars, 971†
Discipline (See Employee)
Dispatching, Telephones for, M. V., 1411
Distribution of the Railway Dollar, 807
Dividend (See Finance)
Dominican Republic: Proposed Purchase of British Railroad, 1005
Double-Capacity Brake, Westinghouse; Virginian, 1199†, 1206*, 1407*
Drainage of Large Cuts, 754*
Drainage for Waterproofing Purposes, 654
Drawbar Pull (See Locomotive)
Drinking Water Supplies on Railroads, 670
Drop Pits, Engine Truck and Tender Wheel, 1254†, 1320

Duff Jack, 602*
Dump Gate, Hulson Locomotive, 339*
Dumper (See Car)
Dunkirk, France, Improvements at 1265*
Dunn, S. O.: Honorary Degree, 1465
Duplex Compensating Suspension, 850*
Durability of Western Ties, 996
Dust Explosion Wrecks Grain Elevator; C. & N. W., 847*, 919†

E

Earnings (See also Revenues and Expenses):
Individual Passenger Trains, 965†, 981*
Return to Capital and Labor, 1381†
Trend of, H. M. Sperry on, 1332*
Easement Curves, Use of, 917†, 933*
East Africa: Railroad Notes, 374
Economic Advantages of Large Locomotives, 1161
Economics (See also American Railway Engineering Association—Report on)
Economics of Movable Spans, 1391*
Economics of Railway Signaling Recommended Committee on, 1303†, 1329
"Economics at Small Expenditures," 542†
Economy and the Engineer, 583, 586
Ecuador: Railroad Notes, 257
Edge, Senator: Foreign Trade, 1124
Edinburg, Ind., Accident, 1289
Education (See Employee)
Efficient Shop Operation, 175†
Efficiency of Freight Locomotive Utilization, 1903-1920, 354†, 359*
Efficiency of Production (See Productive)
Eight-Hour Day in France, 123
Electric Locomotives (See Locomotive)
Electric Power for Traction, 1342, 1427†, 1441*
Electrical Hazards and Their Safeguards, 1289
Electricity, A. R. E. A. Report on, 623*
Electrification:
Armstrong, A. H., on, 518, 1037*
Brazil, 257
Chicago, Milwaukee and St. Paul, 101*, 228*, 323*, 455*, 518
Chile, 346, 818
Comparison of Steam and Electric Locomotives, 1048
Cost, 518, 727, 1037*
Economics of Location as Affected by Introduction of Electric Locomotives, 682
Foreign Countries, 985
Freight Train Operation, 323*
Heavy Electric Traction Program, 386
Helpers in Electric Train Operation, 455*
Henderson, George R. on, 1037*
Long Island, 1001
N. E. L. A. Committee Denounces Government Operation, 1267
Norfolk & Western, 624
Operating Results on Norfolk & Western and C. M. & St. P., 101*, 624
Passenger Train Operation, 227*
Philippines, 1293
Results, C. C. Whittaker on, 838
St. Gothard Line, Switzerland, 1107*
Shepard, F. H. on, 1427†, 1441*
South African Railways, 441†, 482, 886, 1143
Spain, 528
Superpower Survey, Progress Report on, 727
Elimination of Waste, Committee on, 436, 1367
1380†
Elliott, Howard, Before Senate Committee, 1219
Elmore, W. Va., Coal Cars at, 1204*
El Paso & Southwestern: Stock Without Par Value, 265†, 311†
Elwell-Parker Electric Company: Karry Lode Truck, 773*
Embankments, Subsidence and Shrinkage of, 753*
Emergency Work, Organizing for, 1427†
Employee (See also Labor; also Railroad Labor Board):
Agreement with Trainmen; Penna., 106, 240
Apprentice Training: A. T. & S. Fe., 699†, 714
Business Getting; B. & O., 946
Claim Prevention; C. R. I. & P., 895
Classification, 1173, 1223, 1288, 1411, 1459 (Labor Board's Rules)
Courtesy Urged; M. & St. L., 458
Discipline, Brown's; C. P., 396†
Education and Efficiency, 1101†
Education, Humanizing, Engineering, 649†, 651
Educational Work; Great Northern, 567, 591
Efficiency, Increasing, 679
Eight-Hour Day in France, 123
"Gospel of Appreciation"; A. T. & S. Fe., 476
Hiring and Firing of, 329
Individual Progress Report, 719*
Management Problems and the Human Element, 1309*
New Year's Greeting; Penna., 209
Northwestern Pacific's Safety Organization, 1218
Number and Compensation, 301, 468 (table), 728, 795 (table), 812, 894, 1060†, 1382†, 1438 (first quarter of 1921)
Officials Should Get Acquainted with, 965†, 1156†

Employee (See also Labor; also Railroad Labor Board)—(Continued):
Passes; Boston & Maine, 1002
Passes; Pennsylvania, 207
Pennsylvania Full Crew Law Repealed, 1057†, 1085, 1465
Pennsylvania Joint Reviewing Committee, 240
Pennsylvania Railroad Conferences, 1240
"Pennsylvania Standard," The, 775†
"Productive Efficiency" of, 1152†
Promotion, Opportunity for, 1312
Reduction of Forces, 301, 312†, 524, 744†
Relations of Employer and Employee, 387
Relief Department; Pennsylvania, 1465
Stock Purchased; C. M. & St. P., 1085
Strikes:
Atlanta, Birmingham & Atlantic, 548, 710, 724, 811, 834, 1036, 1085
Mexico, 571
Missouri & North Arkansas, 520, 549, 811, 859, 1465
Outlaw, 60, 78
Training of Engine Crew, 1239
Training of Foremen, 396†, 442†, 459, 536†, 650†, 676, 699†, 714, 1309
Training Plans on English Railway, 1092
Training Shop Mechanics, 699†, 714
Wages (See also Railroad Labor Board):
Advances During Federal Control, 1334
Bonus for Welding, 353†
Bonus Systems, Restoration of, 1253†, 1263
Canadian Railways, 787
Compensation and Number, 301, 468 (table), 728, 795 (table), 812, 894, 1060†, 1382†, 1438 (first quarter of 1921)
Cost of Living, Statistics on, 700†, 1040, 1201†, 1336, 1429†
English Boards, 1199†, 1210
First Quarter of 1920, 301
Ford, Henry, Raises, 1367
McAdoo Award in Canada, 787
National Agreements (See Railroad Labor Board)
Orders of Railroad Administration, 1288
Payroll for 1920, 894
Piece Work (See Piece Work)
Plumb, Glenn E., on, 776†
Pullman Conductors, 202
Refreshing Breeze, A., 698†
Time-Rate Payment, 1157*
Wages—Reductions:
A. B. & A., 207, 319, 367, 411, 548, 710, 724, 811, 834, 1036 (Labor Board's Ruling), 1085
Business, Decline of, 445†
Conferences on, 453, 549, 709, 810, 834
Do the Employees Understand? 965†
Erie, 412, 520, 547, 709
Gainesville Midland, 567
Labor Board's Decision, 1173, 1201†, 1240, 1254†, 1259 (text), 1278 (Percentages of Decreases), 1305†, 1335.
Mobile & Ohio, 1085
Necessary to Reduce Expenses, 275, 445†, 491†
Long Island, 810
N. Y. C., 567, 709
N. Y. N. H. & H., 710
Pennsylvania, 549, 710, 810
Petitions Filed by Roads, 846, 903, 1115, 1379†, 1389, 1437, 1438
P. & R., 810
Unskilled Labor, 549, 567, 846
War Gardens: C. R. I. & P., 812
Welfare Campaign Among Mexican Laborers, 1026
Employment Service, J. C. Clark on the, 329
End, Reinforced, for Imperial Culvert, 602*
Engine (See also Locomotive):
Giant Fuel Oil, 605*
Norwood-Noonan, 647*
Engine Crew, Training of the, 1239
Engine Terminals:
Crane and Trucking Facilities, 1320, 1380†
Design, H. E. Stitt on, 829*
Development in 1920, 176†
Drop Pits, Tender Wheel, 1254†, 1320
Equipment Needs, 50*
Increasing the Output, 1319
Light in 543*, 603*, 1325†, 1303*
Norfolk & Western at Roanoke, 1063*
Pere Marquette at Plymouth, 603*
Pere Marquette at New Buffalo, 543*, 1303†
Engine Truck and Tender Wheel Drop Pits, 1254†, 1320
Engineering and Maintenance Material, Prices for, 92*
Engineering and Mechanical Departments, 609†
Engineering Education, Humanizing, 649†, 651
Engineers (See also American Association of):
Operating Conditions, Improving, 577†
Public, Educating the, 577†
Salaries, 266†, 591
England (See Great Britain)
Epochs of American History, Three, 854
Equalization Accounts, Rules Governing, 1438
Equipment (See also Car; also Locomotive; also Mechanical Devices):
International Association Proposed, 1458
Orders in 1920, 135*, 141, 144*
Prices Paid in 1920, 87*

Equipment (See also Car; also Locomotive; also Mechanical Devices)—(Continued):
 Repair Shop Needs, 50*
 Repairs in Outside Shops, 176†, 184, 291, 301, 479, 984, 1225, 1461 (Pennsylvania)
 Report of R. B. A. Committee, 851
 Report, Quarterly, March 31, 1328
 Shortage, 47*, 68
 Virginian Railway, Types on, 1204
 Erecting Aisle Saves Shop Headroom, 521*
 Erie:
 Foreign Trade Service, 481
 Lighterage in New York Harbor, 1187
 Paterson Crossing Case, 268†, 303
 Stoker Fired, Pacific Type Locomotive, Special Run of, 708, 945
 Wages, Conferences on, 709
 Wages Reduced, 412, 520, 547 (Labor Board's Decision)
 Esch, J. J., Appointed to I. C. C., 698†, 303
 Estimated Durability of Western Ties, 997
 "Estimated Possible Savings" (See Lauck)
 Exchange Surcharge on Shipments Between U. S. and Canada, 250
 Executive on the Sixteen Points of Decision No. 119, An, 1018†
 Executives (See Association of)
 Exhibit (See Railway Supply Manufacturers Association; also National Railway Appliances Association, etc.)
 Exhibits (See Railroad Labor Board)
 Expenditures:
 "Economies at Small Expenditures," 542†
 Improvements; M. K. & T., 1305†, 1321
 Maintenance During Guaranty Period, 1395, 1403
 Materials Purchased in 1920, 1304†
 Programs for 1921, 29*
 Expenses (See also Revenues and expenses):
 Reductions by Reducing Wages, 275, 445†
 Where the Money Went, 1102†, 1126
 Explosion:
 Black Tom Damage Suits, 1367
 Gasoline, at Memphis, 416*
 Grain Elevator; C. & N. W., 847*, 919†
 Explosives:
 Annual Report of Bureau, 1174
 Authority of I. C. C. Over Transportation, 1138
 Exports (See Foreign Trade)
 Express (See also American Railway Express Company)
 Container Car; N. Y. C., 315*, 355†
 Service Improved, 1292
 Southeastern Express Company, 209

F

Facilities, Locomotive, Needed, 40, 354†, 359*, 397†
 Facilities, Preparing for New, 965†
 Facilities, "Productive Efficiency" of, 1152†
 Fairbanks, Morse & Co.:
 Annual Report, 820
 Weatherproof Track Scale Floor, 645*
 "Fancy" Salaries of Railway Officers, 1060†
 Farmers:
 Development Association Helps, 1129, 1151†, 1171
 Railroad Situation, 491†
 Rate Reductions Demanded, 1034
 Fate of Railroad Administration Innovations, 81*
 Federal Control (See Government Control)
 Federal Highway Council:
 Store Door Delivery, 524, 1132, 1366
 Federated Malay States, Railways of, 374
 Feed Water Heating, Locomotive, 1235, 1239
 Feiker, F. M., Appointed Assistant to Herbert Hoover, 1183
 Fences, A. R. E. A. Report on, 662*
 Fenestra Window Sash, 603*, 645
 Filing Office Correspondence, 413*
 Finance (See also Accounting; also Revenues and Expenses):
 Bond Prices, 1912-1920, 55
 Capital and Labor's Return, 1381†
 C. B. & O.'s Application to Capitalize Surplus, 417, 499, 837, 940, 1031
 D. L. & W. Stock Dividend, 417, 995
 Dividend Changes in 1920, 91
 Dividend Reduced; Pennsylvania, 1057†
 Foreign Trade, 1102†, 1123
 Great Northern-Northern Pacific Bond Issue, 837, 940, 1031
 Loan to Chile, 266†, 395†
 Northern Pacific, Results on, 1219
 Reading Dissolution Plan, 425, 443†, 535†, 1197†
 Stock Market, The, 697†
 Stock Prices, 1912-1920, 54
 Stock Purchased by Employees; C. M. & St. P., 1085
 Stock Without Par Value, 265†, 311†
 Trend of Railway Earnings, 1332*
 Fire Alarm, Fireklok, 774*
 Fireklok Fire Alarm, 774*
 Fires:
 Extinguished in 1920; Pennsylvania, 429
 Extinguisher, Five-Gallon, 605*
 Miscellaneous, 479, 1186, 1465
 Moral Hazard, The, 871†
 Pullman Car; D. & R. G., 812
 Fiske, Haley: Letter to A. H. Smith on Meeting of Security Owners with Brotherhood Leaders, 928

Fitzgerald, E. H.: National Agreements, 519
 Five-Gallon Fire Extinguisher, 605*
 Flood Lights for Enginehouses; B. & A., 732*
 Floods, Colorado, 1341*, 1399*, 1427†
 Floor, Weatherproof Track Scale, 645*
 Flooring: Texaco Asphalt Mastic on Pennsylvania Barges, 1181*
 Florida Intrastate Rate Case, 817
 Foley, John: Tie Supply of Future, 301
 Ford, E. F.: Loss of Entire Package, 1042
 Ford, Henry, Raises Railroad Wages, 1367
 Foreign Railway News (See also names of countries): Conditions Abroad, 985
 Foreign Trade:
 American Specifications for France, 1006
 Brazil as a Market, 697†, 705*, 823†, 835*
 British Supply Exports, 221†, 535†, 571
 Chilean State Railways an Open Market, 181*, 222†, 241*, 266†, 283*
 Chile, Loan to, 266†, 395†
 Convention, 871†, 1102†, 1123
 Erie Railroad Bulletins, 481
 Exports in November, 304, 305, 346; December, 482, 483, 529; January, 736, 910; February, 1006, 1007; March, 1050, 1141; April, 1294, 1469, 1470
 Exports in 1920, 166*, 490†, 529
 Exports of Coal, 1197†
 Van Alstyne, David, on, 353†, 373, 985
 Foremen, Selection and Training of, 396†, 442†, 459, 536†, 650†, 676, 699†, 714
 Forest Products Section of A. S. M. E., 302
 Forestry Bill, Snell, 479
 Forged Testimony Before Labor Board, 1153†, 1174
 Formula, A. R. E. A., for Maintenance Settlement, 471
 "Four-One" Box, 906*
 France:
 Accidents, Sabotage Hinted in, 1421
 American Specifications, 1006
 Deficits, Railway, 1050
 Fuel Conditions on Railways, 1237
 John Fritz Medal Awarded, 1367
 Labor Unions, Dissension Among, 1373
 Loan for Equipment, 528
 Locomotive Building, 1005
 Peschard, M., on Railway Conditions, 122*
 Pilfering on Railways, 1293
 Progress of Railways, 697†
 Rail Sections, Standard, 1129*
 Railway Reconstruction in, 871†, 879*, 966†, 973*, 1013†, 1020*, 1265*
 Regan Automatic Train Control, 565*
 Westinghouse Air Brake, 571
 Franklin Institute:
 Electrification, A. H. Armstrong on, 518, 1037*
 Steam and Electric Locomotives, 1048
 Franklin Precision Power Reverse Gear Tests of, 1043*
 Free Passes (See Employee—Passes)
 Freight:
 Box, "Four-One," 906*
 Container Car, Express; N. Y. C., 315*, 355†, 1128*
 Container Car for L. C. L.; N. Y. C., 905*
 Container System at New York, 441†, 474
 Conveyor for Railway Water Terminal at Alton, Ill., 522*
 Exchange Surcharge on Shipments Between U. S. and Canada, 250
 Interchange, Motor Truck for, 1169
 Mechanical Handling, 770
 Prepayment on B. & A., 1465
 Store Door Delivery, 524
 Freight Accounts, Report on, 1350
 Freight Car (See Car Freight)
 Freight Car Loading (See Car Service)
 Freight Car Needs, 47*, 314†
 Freight Car Orders in 1920, 144*
 Freight Car Performance in December, 468
 Freight Claim Division, A. R. E. A., Annual Convention, 1198†, 1231
 Freight Claims:
 Box Manufacturer's Aid Claim Prevention, 906
 Central of Georgia's Campaign, 991
 Convention of A. R. E. A. Division, 1198†, 1231
 District Offices; Southern, 1089
 Holabird, W. P., on Reducing, 551
 Hoisington, C. W., on, 1432†
 Loss and Damage, Castle, O. C., on, 1466
 Loss and Damage, F. E. Winburn on, 702†
 Loss and Damage in 1920, 489†, 536†
 Loss and Damage Prevention; C. R. I. & P., 895
 Loss and Damage, Supervision, Better, to Prevent, 1013†
 Loss of Entire Package, 1042
 Perishable Freight in 1919, 493†
 Thefts, Losses by, 824†, 833, 1138
 Freight House:
 Multiple-Storied, 769*
 New York Central at Orange Avenue, Cleveland, 187*
 Freight Locomotive Utilization, 1903-1920, 354†, 359*, 397†
 Freight Rates (See Rates)

Freight Revenues, 1918-1921, 942
 Freight Station Section, A. R. E. A., 859
 Freight Statistics, English, 120
 Freight Terminal (See Yards and Terminals)
 Freight Traffic:
 Fluctuations and Growth of, 9*
 Statistics for October, 209; November, 236, 332; December and Year, 1920, 510, 862; January, 1046, 1086; February, 1132, 1184, 1244; March, 1367, 1368, 1466, 1367, 1368, 1466
 Statistics, 1917 and 1913; M. K. & T., 1324
 Tons Carried One Mile, 1913-20, 1152†
 Year 1920, 569
 Freight Train Operation, Electric, 323*
 Frelinghuysen, Senator:
 Seasonal Coal Rate Bill, 1159, 1467
 Section 10 of Clayton Law, 121, 178†, 191, 208, 231, 250
 Fritz, John, Medal to France, 1367
 Fruit and Vegetable Shipments and Rates, 1402, 1468
 Fuel (See also Coal):
 Accounting, 1276
 Alcohol Locomotives in Brazil, 1469
 Conservation, A. R. E. A., Committee on, 194
 Conservation and Business Depression, 175†
 Conservation Campaign; D. & H., 843*
 Conservation Campaign; P. & R., 733
 Convention of Fuel Association, 1233
 Cost in 1920, 980, 1304†
 Economy, 1272, 1314
 Enginemen's Records, 1275
 French Fuel Conditions, 1237
 Locomotive Improvements, 1239
 Preparation and Distribution, 1271
 Pulverized, Report on, 1235
 Purchases in 1920, 1304†
 Record, A Good, 966†
 Fuel Department Organization, 1272*
 Fuel Oil Engine, Giant, 605*
 Full Crew Law:
 Costs in Indiana, 479
 Repealed in Pennsylvania, 1057†, 1085, 1465
 Functions of the Employment Service, 329
 Fundamental Issues in Labor Controversy, 443†
 Funded Debt Maturing 1920-1949, 368
 Future, Plan for the, 744†
 Futrell Automatic Train Line Connector, 516*

G

Gages and Flangeways for Crossings, 636
 Gap Crane, 521*
 Gasoline Driven Motor Omnibus, 1363*
 Gasoline Explosion at Memphis, 416*
 Gasoline, Storage Outfit for, 1000*
 Gear (See Locomotive)
 Geer, I. W.: Letter Presented to Labor Board False, 1153†, 1174
 General Accounts, Report on, 1349
 General Chemical Tank Car, 203*, 400†
 General Electric Locomotives, Dimensions of, 227*
 General Railroad Developments During 1920, 59*
 General Railway Signal Company: Relays, 604*
 Gennet, C. W., Jr.: Rail Section Chart, 599*
 Germany: Railroad Notes, 571, 1421
 "Get Out and See the Shipper," 965†, 1156†
 Getting the Most Out of Locomotives, 1312*
 Giant Fuel Oil Engine, 605*
 Gibbs, A. W.: Electric and Steam Locomotives Compared, 1048
 Girder Type Guard Rail, 647*
 Godfrey Coaling System, 648*
 Gondola (See Car, Freight—Coal)
 "Gospel of Appreciation"; A. T. & S. Fe, 476
 Government Control (See also United States Railroad Administration):
 Charges Against Railway Officers, 700†
 Davis, James C., Director General, 862
 Deficit First Six Months of 1920, 277
 English Railways, Return of, 1199†, 1209
 Foreign Roads, Conditions on, 985
 Innovations Introduced During, 81*
 Kahn, Otto H., on, 1087
 Loss from Railroad Operation, 1120, 1179.
 Maintenance Expenditures, 1395
 N. E. L. A. Electrification Committee Denounces, 1267
 New Problems, E. E. Clark on, 857
 Payment of Accounts Urged by Samuel Rea, 1285
 Payment of Guaranty (See Guaranty)
 President Wilson's Proclamation, 276
 Results Since Return of Roads, 59*
 Short Lines' Status, 1213
 Three Epochs of History, 854
 Wage Advances During, 1334
 Government Operation (See Government Control)
 Government Ownership:
 Canada's Loss, 883, 918†, 929
 Foreign Roads, Conditions on, 373, 985
 Government Payment (See Guaranty)
 Governors' Committee (See New England)

GENERAL INDEX—Continued

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

Grade Crossings:
 Accidents—Arouse the Public, 1253†
 Erie Ordered to Eliminate Crossings in
 Paterson, N. J., 268†, 303
 Resolutions of National Conference, 385
 Sign, Warning; S. A. & A. P., 478*
 Tennessee, Law in, 1001
 Grading of New England Roads, 195*
 Graft in Chicago Railroad Construction, 946
 Grain Handling, Preparation for, 1268*
 Grain, Last Year's, 569
 Grain Elevator Wrecked; C. & N. W., 847*,
 919†
 Grain Rates, Adjustment of, 882, 1089
 Grain Trade and Maximum Loading, 494†
 Grain Traffic in 1921, 13
 Grand Central Terminal, Fire at, 1186
 Grand Trunk: Locomotives, Heavy Switching,
 338*
 Grand Trunk Western: Mandamus to Compel
 Payment of Guaranty Denied, 208, 249,
 1366
 Graphic Charts, 776†
 Grasselli Chemical Company: 70-Ton Acid Tank
 Cars, 400†
 Grate, Hulson Locomotive, 339*
 Graver Water Softening Plant, 600*
 Gray, C. R.: National Agreements, 776†, 803
 Great Britain:
 Agreements with Government, 1189
 Amalgamation of Two Companies, 1050
 Chile, Railway Construction in, 1253†, 1293
 Collision at Abermule, 1427†, 1450
 Consolidations Proposed, 1199†, 1209
 Difficulties of the Railways, 490†
 Exports of Railway Supply, 221†, 535†, 571,
 910, 1189
 Financial Position of Railways, 1141
 Geddes, Sir Eric, to Retire, 1005
 Labor Conditions, 119
 Ministry of Transport's Railway Policy, 116
 Plumb Plan, 917†
 Railroad Notes, 528, 818, 1092, 1293, 1421
 Railway Bill—Return of Roads, 1199†, 1209,
 1380†, 1470
 Railway Developments During 1920, 115*
 Railway Problems, 966†
 Railway Wages, 1006
 Rate Increases in 1920, 119
 Rates Advisory Committee's Report, 347
 Receipts and Expenditures on English Rail-
 ways, 258, 571
 Rates Tribunal, 1199†, 1210
 Russian Locomotives, Contract to Repair,
 528
 South American Railway, Earnings of, 1190
 Train Reductions, 1142
 Great Northern:
 Bond Issue, Great Northern-Northern Pa-
 cific, 417, 499, 837, 940, 1031
 Educational Plan, 567, 591
 Great Western of England: Training Plan for
 Employees, 1092
 Green, Lincoln: Letter to Senator Harris on
 Reduction in Melon Rates, 1163
 Gregg, R. B.: Pennsylvania Locomotive Re-
 pairs, 1461
 Grinding Locomotive and Car Parts, 1319
 Grooved Point Sounding Rod, 753*
 Groups, English Railway, 1199†, 1209
 Guaranty, Partial Payments of, 5†, 61, 193, 208,
 233, 249, 277, 326, 383, 477, 491†, 513
 (Winslow Bill Signed), 565, 718, 812,
 1285, 1366 (Mandamus Denied—G. T. W.)
 Guaranty Period, Maintenance Expenditures
 During, 1395, 1403 (Accounting of)
 Guard Rail, Girder Type, 647*

H

Hadfield Type of Sink-Head Ingots, 333*
 Haig, M. H.: Designing Large Locomotives,
 1073, 1153†
 Hallucination About Railway Rates, A, 873†
 Hampton Roads, Coal Business at; Virginian,
 1197†, 1199†, 1208*
 Hand Brake, Minich Safety, 1464*
 Hardie, W. V.: Grain Rates, 882
 Harding (See President)
 Harriman Bridge at Portland, 1394*
 Haskell & Barker Car Company, Inc.: Annual
 Report, 912
 Havana, Locomotives for, 897*
 Hearst (See Brisbane, Arthur)
 Heavy Electric Traction Program, A. R. E. A.,
 386
 Hedley, Frank: Inspection of Cars on the In-
 terborough, 1370
 Helpers in Electric Train Operation, 455*
 Helt, D. W.: Signalmen's National Agreement,
 725
 Hennessy Journal Lubricator, 1242*
 Hernandez, S. L.: Welfare Campaign Among
 Mexican Laborers, 1026
 Herty, Charles H.: Railroad Development, 1129
 Hetch Hetchy Railroad, The, 454
 Higgins, J. W.: Before Labor Board, 1336
 Highway Construction in Arkansas, Assessment
 for, 1420, 1428†, 1468
 Highway Construction Program for 1921, 14
 Highway Crossing Signs, 478*, 1168*

Highway Crossing, Steel Plate; C. B. & Q., 608*
 Highways and Motor Transport, 1427†, 1457
 Hill Line Financing (See Chicago, Burlington &
 Quincy)
 Hines, Walker D.: International Equipment As-
 sociation Proposed, 1458
 Hiring (See Employee)
 Hoist, Howlett Automatic Coaling Station, 603*
 Honorary Degrees Conferred, 1465
 Hood, William, Railroad Builder, 1058†, 1100
 Hoover, Herbert:
 Committee on Elimination of Waste, 436,
 1367, 1380†
 Department of Commerce, The, 556, 699†,
 707
 Feiker, F. M., Appointed Assistant, 1183
 Rate Reductions Needed, 979, 1058†
 Resignation from American Engineering
 Council, 1045
 Stability of Purchases, R. B. A. on, 852
 House Committee on Interstate and Foreign
 Commerce: Winslow Bill, 233
 House of Representatives: Repair Contracts,
 176†, 185
 Howlett Construction Company:
 Fenestra Window Sash in Pere Marquette
 Roundhouse, 603*, 645
 Hoist, Automatic Coaling Station, 603*
 Huddleston, Representative, on Repair Contracts,
 176†, 185
 Hulson Shaking Dump Grate, 339*
 Human Element and Managements, 1309*
 Human Element in Engineering, 649†, 651
 Human Standards and Railroad Policy, 938
 Hunt, Robert W. & Co.:
 Rail Failure Chart, 696
 Rail Section Chart, 599*
 Hustis, J. H.: New England Situation, 779†,
 801

I

Ideals of Railroad Managers, 538†
 Idle Cars (See Car Service—Loading)
 Illinois Central:
 On-Time Record, 524
 Program of Improvements, 1379†, 1419
 Illinois, Legislation in, 1253†
 Illinois Terminal Railroad: Conveying System
 at Alton, 522*
 Imperial Culvert with Reinforced End, 602*
 Improvements (See also Additions and Better-
 ments; also Construction, New) Expendi-
 tures: M. K. & T., 1305†, 1321
 "Inadequacies of Railway Management," 1014†
 Incentives (See Piece Work)
 Income, Catechism, Railway, 557
 Income Tax Returns in New York, 812
 Increasing Engine Terminal Output, 1319
 India: Railroad Notes, 257, 374, 1049, 1190,
 1470
 Indiana, Full Crew Law Costs in, 479
 Individual Passenger Trains, Earnings of, 965†,
 981*
 Individual Progress Report, 719*
 Industrial Works: Locomotive Crane Boiler,
 1182*
 Ingersoll-Rand Company: Test to Determine
 Cost of Pneumatic Tie Tamping, 721
 Ingots, Sink-Head and Comparison, 333*
 Initial Terminal, Classification at the, 493†, 969†,
 971†
 Innovations of Railroad Administration, 81*
 Inspection Car, Kalamazoo Motor, 602*
 Inspection, Intelligent, Importance of, 446†
 Inspection of Boilers in Canada, 733
 Inspection of Cars on the Interborough, 1370
 Interborough, Car Inspection on the, 1370
 Interchange (See Car Service; also Freight)
 Interline Accounting, Report on, 1348, 1405
 Interlocking (See Signaling)
 Intermediate Rate Association: I. C. C. on Rates
 to Intermountain Territory, 1034
 Intermountain Territory, Rates to, 1034
 International Association of Machinists: Re-
 pairs in Outside Shops, 176†, 184, 291,
 301, 479, 984
 International Equipment Association Proposed,
 1458
 International Railway Association: Program of
 Ninth Congress, 1373
 International Railway Fuel Association: An-
 nual Convention, 1233, 1271*
 Interstate Commerce Commission:
 Accident Bulletin No. 76, 253; No. 77, 946
 Accident Reports: B. & O. at Glenwood, 832
 Accident Reports: C. M. & St. P. at Pied-
 mont, 726
 Accident Reports: N. & W., near Welch,
 1418
 Accident Reports: Porter, Ind., Collision,
 775†, 808*, 823†, 876†
 Accident Reports, Third Quarter, 1920, 505
 Accounting Rules, 1343
 Appropriation for, 386
 Bureau of Safety and Automatic Train
 Control, 590, 1045, 1330, 1467
 Burlington and Lackawanna Applications to
 Capitalize Surplus, 417, 499, 837, 940,
 1031

Interstate Commerce Commission (Continued):
 Chairman Clark on Partial Payments, 235
 Chairman Clark on Reducing Rates, 546,
 858, 936, 979, 1042, 1436
 Chairman Clark Re-elected, 1466
 Classification of Employees, 1459
 Constructive Work in 1920, 5†
 Cost of Train Operation, 1086, 1183, 1411
 Employees and Their Compensation, 301,
 468 (table), 728, 795 (table), 812, 894,
 1060†, 1438 (first quarter of 1921)
 Explosives, Transportation of, 1138
 Fruit and Vegetable Rates, 1468
 Grain Rates, Adjustment of, 882, 1089
 Great Northern-Northern Pacific Bond Issue,
 837
 Loans to Railroads, 62, 95*, 198
 Members, New, 698†, 715*
 Mississippi Valley Case, 1188
 New England Railroad Problem, F. J. Lis-
 man Suggests Solution for, 1028
 New England Rate Divisions, 296, 327, 387
 New York Central's Application to Construct
 Cleveland Terminal, 498
 New York Central Proposes Lease of Chi-
 cago Junction, 32, 1086, 1131
 Operating Statistics for October, 209; No-
 vember, 236, 332; December and 1920,
 510, 862; January, 1046, 1086; February,
 1132, 1184, 1244; March, 1367, 1368, 1466
 Payroll, Railroad for 1920, 894
 Pennsylvania Locomotive Repairs, 1461
 President Harding Confers with, 1262
 Pullman Fare Hearing, 1463
 Rates on California Fruits, 1042
 Repairs in Outside Shops, 176†, 184, 291,
 301, 479, 984, 1225, 1244, 1461
 Revenues and Expenses for September, 72;
 October, 72; November, 301; December,
 and year 1920, 467, 492†, 524; January,
 947; February, 1002; March, 1244; April,
 1418, 1466
 Seasonal Coal Rate Bill, 1159
 Shipping Board Asks Re-establishment of
 Rates, 717
 Smith, N. K. on Rates, 206
 Traffic Statistics (See Operating Statistics
 under this head)
 Train Control Devices, 851
 Valuation Act, Amendment to, 282
 Valuation Fixed at \$18,900,000,000, 299
 Valuations, Protests Against, 889, 1087, 1132
 Valuations, Tentative, 75, 887, 1366
 Valuations, Final: K. C. S., L. A. & S. L.,
 A. B. & A. and W-S Southbound, 887,
 1087
 Western Live Stock Rates Asked, Reduc-
 tion in, 409
 Wisconsin Rate Case, 470, 511, 716
 Interstate Commerce Commission Rulings:
 Coal-Car Distribution Rules, 816
 Coal Rates, Lake Cargo, Reduced, 1089
 Competitive Bids Under Clayton Law, 231
 D. L. & W. Stock Dividends, 417, 995
 Equalization Accounts, Rules Governing,
 1438
 Florida Intrastate Rate Case, 817
 Great Northern-Northern Pacific Bond Issue,
 417, 499, 837, 940, 1031
 Operating Statistics, Reporting, 523
 Rate Increases to Points Near Regional
 Border Line, 816
 Rates to Intermountain Territory, 1034
 State Rates, Changes in, 909
 Suspension Procedure, 1090
 Telegraph Negligence, Liability for, 1245
 Texas Intrastate Rate Case, 504
 Investigation (See Senate Committee)
 Investment, Return on, 1335*
 Investors' Attitude Toward Railroad Securities,
 53*
 Iron and Steel Structures, A. R. E. A. Report
 on, 650†, 653*
 Italy: Railroad Notes, 1049, 1141

J

Jack, Duff, 602*
 Jacking Stall at Lafayette; C. I. & L., 1325*
 Japan: Railroad Notes, 376, 1092
 Jennison-Wright Co.: Kreolite Crossing, 606*
 Jewell, B. M.: Before Labor Board, 364, 398†,
 411, 443†, 451, 549, 803, 845, 899, 902,
 937, 1075, 1153†, 1156†, 1174, 1136
 John Fritz Medal to France, 1367
 Joint Criminal Law Bureau Proposed, 824†, 833
 Joint Reviewing Committee, Pennsylvania, 240
 Journal Lubricator, Hennessy, 1242*
 Junctions, Automatic Signals at, 1165*

K

Kahn, Otto H. on Railroad Regulation, 1087
 Kalamazoo Motor Inspection Car, 602*
 Kansas City Southern:
 Assessment for Highway Construction, 1420,
 1428†
 Valuation, 74, 887, 1087, 1132
 Karry Lode Truck, 773*

"Keep Trains Moving," 221†, 226†
 Kreolite Crossings, 606*
 Kruttschnitt, Julius: Testimony Before Senate Committee, 1125, 1178
 Kushequa Route, Time-Table of, 1186

L

Labor (See also Employee; also Railroad Labor Board):

Brotherhood Leaders Confer with Security Owners, 904, 928
 Developments in 1920, 78*
 Employment Service, The, 329
 England, Conditions in, 119
 English Wages Boards, 1199†, 1210
 Foreign Roads, Conditions on, 985
 French Problems, 124
 Loree, L. F.: Proposal of, 387
 Mexican Laborers' Welfare Campaign Among, 1062
 Molitor, F. A., on, 1040
 Morale of Shop Forces, 353†
 Norfolk Western Dispute, 126
 Organization of Subordinate Officials, 180†
 Pennsylvania's Agreement with Trainmen, 106, 240
 Piece Work (See Piece Work)
 President Declines Employees' Requests, 363
 Readjustment in Maintenance of Way Department, 177†
 Reconstruction in 1921, 77*
 Repairs in Outside Shops, 176†, 184
 Report of A. R. E. A., 650†, 675*
 Return from Railway Earnings, 1381†
 Supervision, Importance of, 400†
 Turnover, 1151†
 Wages, Cost of Living and Productive efficiency, 1429†
 Willard, Daniel, on, 428
 Wise Course for Leaders, The, 1138
 Year 1921, 4†

Labor Board (See Railroad)

Labor Committee (See Association of Railway Executives)

Lafayette, Ind.: Car Repair Shop; C. I. & L., 1303†, 1325*

La Follette (See Senator)

Lake Erie & Eastern:
 Painting, Bridge, Test of, 561*

Lamont Truck, 401*, 729*

Lamp, Carbic Model M., 601*

Lamp Standards, Tungsten, 626

Lancashire & Yorkshire: Amalgamation with London & North Western, 1050

Lane-Galloway Mechanical Trimmers, 1433*

Late Trains, Reduce Number of, 175†

Lauck, W. J.:

Carriers Answer Charges, 1101†, 1113
 Exhibits Presented to Labor Board, 899, 903, 938, 1014†, 1015†, 1076, 1101†, 1113, 1139, 1176
 Loree, L. F.: Answers Charges, 1139
 Repairs in Outside Shops, 176†, 184, 291, 301, 479, 984
 Willard, Daniel, Challenges Statement, 1176

Law (See Legislation)

Lawrenceburg, Ind., Bridge; B. & O., 509*

Lee, W. G., Before Labor Board, 1336

Legal Decisions:

Assessment for Highway Construction in Arkansas, 1420, 1428†
 Assumption of Risk, 817
 Bill by Stockholders to Enjoin Consolidation of Lake Shore and New York Central, 1372
 Black Tom Damage Suits, 1367
 Boiler Inspection Act, 388, 1091
 Coal Car Distribution, 1189
 Contributory Negligence at Flag Station, 388
 Crossing Accidents, 817, 1371
 Director General and Georgia Justice, 736
 Employment by Fraud, Bars Recovery, 303
 Exclusive Privilege to Solicit Business, 388
 Federal Employers' Liability Act, 736, 1091, 1189, 1293
 Federal Taxation Act—Depreciation, 1372
 Foreclosure Purchasers Cannot Be Compelled to Operate at Loss, 817
 Freight Rates for Government Property, 736
 Freight Removal Within 48 Hours, 1420
 Grand Trunk Western Denied Mandamus, 1367
 Guaranty, Payment of, 208
 Hours of Service Act, 1188, 1371, 1372
 Limitation of Liability Without Choice of Rates—U. P. v. Burke, 570
 Miscellaneous, 817, 955, 1188, 1372
 Passengers, Reasonable Care of, 1372
 Paterson Crossing Case: Erie, 268†, 303
 Penalties Not Recoverable Against Director General, 1420
 Railroads Not Bound to Operate at Loss, 303
 Rates for Transportation of Soldiers, 1189
 Reading Plan Approved, 1197†
 Risk on Waiting Freight, 1468
 Safety Appliance Act, 1091

Legal Decisions (Continued):

St. L.-S. F. Order to Restore Train Service, 304
 Switch Engines Not Nuisance, 1188
 Tank Cars, Diverted, 1469

Legislation:

Bills in Congress, 1003, 1292
 Full Crew Law Costs in Indiana, 479
 Full Crew Law Repealed in Pennsylvania, 1057†, 1085, 1465
 Grade Crossings in Tennessee, 1001
 Illinois, New Public Utilities Commission Proposed for, 1253†
 Payment of Guaranty (See Guaranty)

Lehigh Valley:

Annual Report, 1105†
 Black Tom Damage Suits, 1367

Leigh, E. B.: Equipment Policies, 851

Lewis Truck, 405*

Lift Bridges, 1391*

Lighterage in N. Y. Harbor; Erie, 1187

Light in Railway Buildings, 1303†

Light Signals, Requisites for, 1329

Lights, Flood, for Enginehouse; B. & A., 732*

Lights, Signal, and Accidents, 1380†

Lille, France, Reconstruction in, 1020*, 1265*

Lille-la-Delverance Terminal, 1265*

Lisman, F. J.: Suggested Solution for New England Railroad Problem, 1028

Little Giant Air Drill, 696*

Little Giant Locomotive Crane, 646*

Loading (See Car Service; also Train)

Loan to Chile, 266†, 395†

Loans from Revolving Fund, 62, 95*, 198

Location of Automatic Block Signals, 1329

Locomotive:

Alcohol, in Brazil, 1469

Assigned, 1240

Automatic Control of Cut-Off, 1451*

Belgium, American Locomotives in, 442†, 462

Boiler Code, A. S. M. E., 947

Boiler, Crane, 1182*

Boiler Improvements, 1239

Booster, G. M. Basford on, 1229

Booster, Opportunity for the, 226†

Clearing Engines, 1314

Consolidation, Pershing, for Havana, 897*

Consolidation; Western Maryland, 1117*

Converting Old Engines, 1313

Crown Sheet Failure, A. 885*

Design, 1023, 1073, 1153†

Drawbar Pull and Cut-Off, 1451*

Electric:

Comparison with Steam, 1048

Passenger and Freight, 227*, 323*

Paulista Railway of Brazil, 1049*

St. Gotthard Line, Switzerland, 1111*

Facilities Needed, 40, 354†, 359*, 397†

Feed Water Heating, 1235, 1239

Freight Locomotive Utilization, 1903-1920, 354†, 359*, 397†

Gear, Franklin Power Reverse, 1043*

Getting the Most Out of, 1312*

Grate, Hulson, 339

Heavy Switching; Grand Trunk, 338*

Improvements for Economical Operation, 1239

Improvements; M. K. & T., 1323

Large, Design of, 1023, 1073, 1153†

Large, Economic Advantages of, 1161

Maintenance, 1313

Mallet; Virginian, 1199†, 1204*

Mallets, Enginehouse for, N. & W., 1065*

Mikados on Argentine State Rys., 722*

Mountain Type; C. R. I. & P., 447*

Needs, 43*

Orders in 1920, 135*

Ownership, March 31, 1921, 1328

Pacific, for Havana, 897*

Pacific Type; Reid Newfoundland, 994*

Pacific Type, Stoker Fired, Special Run; Erie, 708, 945

Prices, 87*

Reconstruction of Old Locomotives, 237*

Repairs, Cost of, 185

Repairs, Outside, 176†, 184, 291, 301, 479, 984, 1225, 1461 (Pennsylvania)

Stoker Fired Engine; Erie, 708, 945

Stored and Selected Power, 354†

Switcher, Eight-Wheel, for Havana, 897*

Virginian, Types on, 1204

Vitalizing, G. M. Basford on, 1227*

Locomotive Crane Boiler, 1182*

Locomotive Crane, Brownhoist, 1130*

Locomotive Crane Company: Model A Little Giant Crane, 646*

Locomotive Superheater Company:

Feed Water Heater Company Taken Over, 438

Vice-Presidents, New, 531*

Locomotive Terminal (See also Engine Terminals): Development in 1920, 176†

London & North Western:

Annual Report, 1141

Lancashire & Yorkshire Absorbed, 1050

Long Island:

Commutation Tickets, Misuse of, 1131

Electrification, 1001

Wage Reductions, Conferences on, 810

Long Term Credits, Need for, 1123

Lord Shaughnessy Proposes C. P. R. Operate Canadian National, 1069

Loree, L. F.: Labor, Proposal Regarding, 387

Loree, J. T.: "Conservation Commission," A, 175†

Los Angeles & Salt Lake: Valuation, 887, 1087

Los Angeles Union Terminal, 1140

Loss and Damage (See Freight Claims)

Loss from Railroad Operation During Federal Control, 1120, 1179

Louisville & Nashville:

Annual Report, 921†*

Piece Work Pay, Abolition of, 298

Western Union Wires, Litigation Over, 568

Wireless Telegraph, 253

Low-Voltage Switch Machines, 1077*

Loyall, G. R., 1241*

Lubricator, Hennessy Journal, 1242*

Lumber Traffic in 1921, 12

M

MacDonald, Charles M.: Freight Claims, 1138

Machine Shop Practice, 1319

Machines, Office, 775†, 797* (N. Y. C.), 965†, 981*, 1198†, 1215* (Pennsylvania)

Machines, Use More, 1380†

Machinists (See International Association of Machinists)

Mail:

Aerial Service, 480

Container Car System; N. Y. C., 1128*

Pay Due Railroad Administration, 274, 387

Thefts, 1411

Maine Central: Annual Report, 780†*

Maintenance Charges (See Maintenance Expenditures)

Maintenance Claims, Board of Referees May Consider, 94

Maintenance Equipment Company: Power Ballast Screen, 606*

Maintenance Expenditures, Accounting of, 583, 1403

Maintenance Expenditures During Guaranty Period, 1395, 1403

Maintenance of Freight Cars, 563, 698†, 699†, 1316

Maintenance of Locomotives, 1313

Maintenance of Way:

Labor Readjustment, 177†

National Agreements for Employees, 588, 725

Piece Work Plan, A, 1253†, 1263

Progress Charts, 311†

Progress During 1920, 85*

Scientific Treatment Needed, 581

Supervision, 177†, 265†, 311†, 355†

Track, Uniform Maintenance of, 918†

Maintenance Settlement, A. R. E. A., Formula for Arriving at, 471

Making or Breaking the Railroads, 557

Management (See also Railway; also Officer):

Human Element in, 1309*

Mandamus to Compel Payment of Guaranty; G. T. W., 208, 249, 1366

Manufacturers, Co-operation with the, 701†

Manufacturers to Fight Adjustment Boards, 84

Mantell, J. J.: Transportation Problem of Metropolitan District of New York, 441†, 473

Mapother, Wible L., 800*

Marine Borers, A. R. E. A. Report on, 744†, 760

Marine Borers Invade Piling in San Francisco Bay, 399†, 420*

Marine Equipment Manufacturers' Association, 342

Market Reporter: Fruit and Vegetable Shipments, 1402, 1468

Markham, C. H.: Letter on Illinois Central's Program of Improvements, 1379†, 1419

Maryland Steel Company: Ingots, Sink-Head and Ordinary, Compared, 333*

Masonry, A. R. E. A. Report on, 743†, 744†, 746*

Mastic, Texaco Asphalt, 1181*

Material (See also American Railway Association—Purchases and Stores Section):

Accounting, 1357

Classification of, 1356

Prices for, 92*

Reclamation of, 767, 1361

Shop Transportation Systems, 1057†, 1319

Track Material Report, Monthly, 766

Unit Piling, 1358

Material Handling Equipment:

Developments in Methods, 107*

Machines, Uses More, 1380†

Mechanical Handling of Freight, 770

Railway Water Terminal at Alton, 522*

Maximum Car Loading, Views on, 494†

Mayor Peters (See Peters)

Mechanical and Engineering Departments, 609†

Mechanical Department's Big Program, 1309*

Mechanical Devices in Railway Offices, 775†, 797* (N. Y. C.), 965†, 981*, 1198†, 1215* (Pennsylvania)

Mechanical Division (See American Railway Association)

Mechanical Handling (See Material Handling)

Mechanical Trimmers for Handling Coal at Curtis Bay; B. & O., 1433*

Medal, John Fritz, to France, 1367

GENERAL INDEX—Continued

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

- Medical and Surgical Section (See American Railway Association)
- Melton Rates, Southern Roads Decline to Reduce, 1163
- Memphis, Gasoline Explosion at, 416*
- Men, Art of Working with, 965†, 1156†
- Merchants' Association of New York: Port of New York, 1290
- Merchants Dispatch Transportation Company: Container Cars; N. Y. C., 315*, 905*
- Mexican Laborers, Welfare Campaign Among, 1026 †
- Mexico:
- Lease of American Equipment, 354†, 382
 - Railroad Notes, 346, 347, 528, 1005, 1373, 1470
 - Railway Condition, W. M. Whitenton on, 113*
 - Railway Strike, 571
 - Traffic to, 395†, 1202†
- Miami Valley Traffic Club Organized, 436
- Michigan Central:
- Collision at Porter, Ind., 495*, 539†, 568, 775†, 808*, 823†, 876†
 - Kreolite Crossing in Toledo, 606*
- Midland Valley: Telephones for Dispatching, 1411
- Mileage Abandoned During 1920, 151*
- Mileage Built in 1920, 153*
- Mileage, Car, Contest on Increasing, 368
- Mileage of the World, 367
- Mill Defects and Transverse Fissures, 1013† 1029
- Millener, J. A.: Pullman Fare Hearing, 1463
- Milwaukee Traffic Club: Officers Elected, 481
- Mine Ratings and Car Supply, 314†
- Minich Safety Hand Brake, 1464*
- Minneapolis & St. Louis:
- Courtesy Act, 458
 - "Think and Act," 442†
- Ministry of Transport (See Great Britain)
- Minwax Waterproofing, Test of, 605
- Mississippi Valley Rate Case, 1188
- Missouri & North Arkansas: Wages Reduced—Strike, 454, 520, 549, 726, 811, 859, 1465
- Missouri-Illinois Railroad Opened, 1289
- Missouri, Kansas & Texas:
- Agreement Controversy with Employees, 1437
 - Progress Since 1913, 1305†, 1321, 1385
- Mobile & Ohio: Wage Reductions, 1085
- Modern Engine Terminals, H. E. Stitt on, 829*
- Modern Locomotives Efficiently Used? 354†, 359*
- Molitor, F. A.: Railroad Problem, 1040
- Money (See Cost)
- Monthly Summary (See Revenues and Expenses)
- Monthly Track Material Report, 766
- Moorshead, A. L.: Steam Heated Cars, 946
- Moral Hazards of Various Kinds, 871†
- Morale of Shop Forces, The, 353†
- Moshassuck Valley Railroad: Passenger Service Suspended, 1198†
- Motive Power Facilities Needed, 40, 354†, 359*, 397†
- Motive Power Needs, 43*
- Motor Cars:
- Gasoline Driven; Chesapeake Western, 1363*
 - Kalamazoo Inspection, 602*
 - Lamp, Carbic Model M, 601*
 - Safety Railings, 645*
 - Track Mower Attachment, 773*
- Motor Omnibus and Trailer, 1363*
- Motor Transport, Stuart B. Moore on, 1427†, 1457
- Motor Truck for Interchange, 1169
- Movable Bridge, Engine for, 647*
- Movable Bridge Spans, 1391*
- Moving Pictures of Scrap Reclamation, 1361
- Mudge & Co.: Safety Railings for Motor Cars, 645*
- Multiple-Storied Freight Houses, 769*
- Municipally-Operated Mountain Railroad, A, 454
- Mystic River Bridge; N. Y. N. H. & H., 711*
- "McAdoo Award" in Canada, 787
- McClure, J. S.: Advice to Ticket Sellers, 860
- McManamy, Frank: National Agreements, 937
- McVann, E. J.: Shippers' Viewpoint on Railroad Problem, 1040
- N**
- Narragansett Pier Railroad: Contributions from Towns, 1183
- Nashville, Chattanooga & St. Louis: Overcharge Claims, 1290
- National Adjustment Boards: Manufacturers to Fight, 84
- National Agreements (See Railroad Labor Board; also Senate Committee)
- National Association of Owners of Railroad Securities:
- Board of Economics and Engineering, 1364, 1383†, 1449
 - Conference with Brotherhood Leaders, 904, 928
 - Conference with President Harding, 931
- National Association of Railroad Tie Producers: Tie Specifications, 475
- National Association of Machinists: Repairs in Outside Shops, 176†, 184, 291, 301, 479, 984, 1244, 1461
- National Boards of Adjustment and National Agreements, 79
- National Civic Federation at New York: Present Day Problems of the Railroads, 427
- National Conference on Highway Traffic Regulations: Resolutions Regarding Dangerous Crossings, 385
- National Electric Light Association:
- Electric Power for Railroad Traction, 1342
 - Government Operation Denounced, 1267
- National Farmers' Union: Memorial on Reducing Freight Rates, 1034
- National Foreign Trade Convention, 871†, 1102†, 1123
- National Highway Crossing Company: Steel Plate Crossing, 608*
- National Industrial Conference Board: Wages and Cost of Living, 700†
- National Industrial Traffic League:
- Abuse of Order-Bill Form, 735
 - Committee to Confer with Shippers, 344
 - National Agreements, 724, 902
 - Resolutions on Obtaining Redress, 1244
- National Railway Appliances Association:
- Exhibit, 265†, 303, 577†, 578†, 586, 592* (list of exhibitors)
 - Meeting, 640
- National Railway Service Corporation:
- Equipment Loans, 97
 - Railroad Plan of S. Davies Warfield, 793, 872†, 1448
- National Railway Service, The, 872†
- National Railways of Mexico: Lease of American Equipment, 354†, 382
- National Wages Board, English, 1199†, 1210
- Neosho Community Development Plan, 1172
- New Buffalo Engine Terminal; P. M., 543*
- New Construction (See Construction)
- Net Operating Income in 1920, 129*
- New England Railroad Club:
- Freight Claims—Thefts, 1138
 - Service of Supply, The, 268†, 279
- New England Railroads:
- Consolidation Opposed, 355†, 386
 - Governors' Committee Opposes Rate Raise, 527, 779†, 801, 1057†, 1071 (report)
 - I. C. C. Hearing on Rate Divisions, 296, 327, 387
 - Lisman, F. J., Suggests Plan, 1028
- New England Traffic League Opposes Rate Reductions, 1370
- Newfoundland: Railroad Notes, 257, 1411
- New Jersey Joint Yard, 270*
- New Jersey-New York Terminal Problems, 266†, 269*, 441†, 473
- New Jersey P. U. Commission:
- Patterson Crossing Case, 268†, 303
- New Mexico: Welfare Campaign Among Laborers on A. T. & S. Fe., 1026
- New York Air Brake Company: Annual Report, 572
- New York Central:
- Automatic Stops and New York Commission, 715
 - Junction, Lease of, Chicago, 32, 1086, 1131, 1186
 - Cleveland Passenger Terminal Planned, 498
 - Collision at Porter, Ind., 495*, 539†, 568, 775†, 808*, 823†, 876†
 - Container Car, Express, 315*, 355†, 1128*
 - Container Car, L. C. L. Freight, 905*
 - Dictating Machines in Offices, 775†, 797*
 - Electrical Hazards, Safety Devices for, 1289
 - Freight House at Orange Avenue, Cleveland, Operating, 187*
 - Fuel Performance Records, 1275
 - Mail Service, Container Car, 1128*
 - Passenger Fares Reduced, 1089
 - Piece Work Pay, Abolition of, 298, 1223
 - Repairs in Outside Shops, 1225
 - Smith, A. H., Before Senate Committee, 1178, 1223
 - Smith, A. H., Confers with President-Elect Harding, 463
 - Smith, A. H. on Conference of Security Owners with Brotherhood Leaders, 904, 928
 - Tests on Rails, 630
 - Wages of Unskilled Labor—Labor Board Denies Petition to Reduce, 709, 902
- New York, Chicago & St. Louis: Annual Report, 1423
- New York City: Daylight Saving, 815
- New York, New Haven & Hartford:
- Bridge, Mystic River, 711*
 - Pearson, E. J. on New England Railroad Problem, 1072
 - Wage Reductions, 710
- New York-New Jersey Port and Harbor Development Commission:
- Report, 266†, 269*, 441†, 473
- New York-New Jersey Port Commissioners, 1001
- New York Port (See Port)
- New York Public Service Commission:
- Annual Report, 286
 - Automatic Train Control, 497, 715
 - Reorganization, 862, 928
- New York Railroad Club:
- Dunn, S. O., on Railroad Problem, 275
 - Government Operation Abroad, 985
 - Mantell, J. J., on New York Railway Terminal Problems, 441†, 473
 - Safety of Passengers in Steel Railway Cars, 781*
 - Vitalizing Locomotives, 1227*
- New York Section, A. S. C. E.: Officers, 1243
- New York State Tax Returns, 812
- New York Terminal Problems, 441†, 473
- New York Times on Lauck's Exhibits, 903
- Nicholson Thermic Syphons, 449*, 885*
- Nitrate Railways, Earnings of, 1421
- Non-Interlocked Crossings, 1165*
- Norfolk & Western:
- Air Brake Tests, 907
 - Annual Report, 874†*
 - Car, 100-Ton Coal, 917†, 923*
 - Electrification, Operating Results of, 101*, 624
 - Enginehouse at Roanoke, Va., 1063*
 - Labor Dispute, 126, 202, 412
 - Piece Work Pay, Abolition of, 298
- North Station, Boston: Train Sheds, 1211*
- Northern Pacific:
- Bond Issue, Northern Pacific-Great Northern, 417, 499, 837, 940, 1031
 - Results on, Howard Elliott on, 1219
- Northwestern Pacific: Safety Organization, 1218
- Norwood-Noonan Engine, 647*
- Noxon, Frank W.:
- Partial Payments Urged, 235
 - Railway Income Catechism, 556
- Number (See Employee)
- O**
- Occupational Classification, 1459
- Office Correspondence Filing, 413*
- Office Mechanical Devices, 775†, 797* (N. Y. C.), 965†, 981*, 1198†, 1215* (Pennsylvania)
- Officers:
- Accounting Officer's Work, The, 1343
 - Charges Should Be Answered, 700†
 - Co-operation with Manufacturers, 701†
 - Get Acquainted with Employees, 965†, 1156†
 - Graphic Charts, 776†
 - Individual Progress Reports of Employees, 719*
 - Pennsylvania Joint Reviewing Committee, 240
 - Salaries, "Fancy," 1060†
 - Shipper, Business from the, 965†, 1156†
- Oil Engine, Giant Fuel, 605*
- Oil: Hennessy Journal Lubricator, 1242*
- Oklahoma, Rate Reductions in, 1371
- On-Time Record: I. C., 524
- Operating, Cost (See Cost)
- Operating Efficiency:
- "Economies at Small Expenditures," 542†
 - Increasing Traffic Capacity, 679
 - Terminal Operation, 493†, 969†, 971†
 - Transportation Economies, 918†
- Operating Ratios of Canadian Railways, 929
- Operating Results and Expenses, 1919-20, 1175
- Operating Statistics for October, 209; November, 236, 332; December and 1920, 510, 862; January, 1046, 1086; February, 1132, 1184; March, 1367, 1368, 1466
- Operating Statistics, Rules for Reporting, 523
- Operating Studies:
- Missouri, Kansas & Texas, 1305†, 1321, 1386
 - Virginian, 1199†, 1203*
- Optimistic View of Railway Situation, 377
- Order Bill of Lading, Misuse of, 735
- Ordinance Officers, Organization of, 1367
- Organization:
- Army Ordnance Association, 1367
 - Emergency Work, 1427†
 - Fuel Department, 1272*
 - Fundamentals of, 763
 - Mechanical Department's Program, 1309*
 - Missouri, Kansas & Texas, 1325
 - Prevention of Thievery, 824†, 833
 - Subordinate Officers, Recognition of, 180†
 - Supply Department, The, 223†, 268†, 279
 - Training Subordinate Officers, 442†, 459, 536†
- "Orohan Clerk" on Seniority Rule, 876†
- Ottumwa Box Car Unloader, 999*
- Outlaw Strikes in 1920, 60, 78
- Outside Repairs (See Repairs)
- Overcharge Claims (See Claims)
- P**
- Pacific Railway Club: Municipally-Operated Mountain Railroad, A, 454
- Pacific Type (See Locomotive)
- Painting Equipment, Spray, 601*
- Painting Schedule, Keep Up the, 823†
- Painting Tests, Bridge; P. & L. E., 561*
- Panama Canal, Competition with, 777†
- Panama Canal Traffic, 1127, 1283
- Partial Payment (See Guaranty)
- Passenger Accounts, Report on, 1353

Passenger Car Orders in 1920, 141
 Passenger Fares:
 Canada, Reductions in, 1467
 Cash Fare Penalty; Pennsylvania, 946
 Pullman Fare Hearing, 1463
 Reduction; A. T. & N., 907
 Reduction; N. Y. C., 1089
 Passenger Station:
 Specification for Type No. 1, 751*
 Track Layouts, 771*
 Passenger Traffic:
 Increases, Effect of, Rate, 70, 824†
 Shriners' Convention, 1419
 Statistics for September, 209; November, 569;
 January and Five Months, 824†
 Passenger Train Operation, Electric, 227*
 Passenger Trains, Delays to, 175†
 Passenger Trains, Earnings of Individual, 965†,
 981*
 Passenger Trains, Rough Handling of, 226†,
 971†
 Passes (See Employee)
 Paterson Crossing Case; Erie, 268†, 303
 Paulista Railway: Electric Locomotive, 1049*
 Pay (See Employee—Wages; also Salary; also
 Mail)
 Payment of Federal Control Accounts, Samuel
 Rea on, 1285
 Payment, Partial (See Guaranty)
 Payroll for 1920, 894
 Pearson, E. J.: New England Problem, 1072
 "Peerless" Steel Tie, 252*
 Penalty of Bad Car Conditions, A, 699†
 Pennsylvania:
 Accident at Edinburg, Ind., 1289
 Agreement with Trainmen, 106, 240
 Anniversary, 75th, 945, 1001
 Annual Report, 539†*
 Atterbury, W. W., on National Agreements,
 312†, 317, 363, 397†, 805, 1153†, 1174,
 1240
 Cash Fare Penalty, 946
 Dividend Reduced, 1057†
 Employees, Conferences with, 1240
 Employees Told the Facts, 775†
 Fires Extinguished in 1920, 429
 "Geer," Letter False, 1153†, 1174
 Joint Reviewing Committee, 240
 Locomotive Repairs, Hearing on, 1461
 Mechanical Devices for Offices, 1198†,
 1215*
 New Year's Message, A. 209
 Passes to Employees, 207
 Piece Work Pay, Abolition of, 298
 Reduction in Service, 567
 Relief Department, 1465
 Repairs in Outside Shops, 984, 1461
 Scheduled Freight, Record of, 1244
 Seventy-Fifth Birthday, 945, 1001
 Texaco Asphalt Mastic on Barge, 1181*
 Tickets, Prices Printed on, 300
 Ties, Steel, near Parkersburg, 252*
 Wage Reductions, 549, 710, 810
 Pennsylvania Bankers' Association: County, A.
 J., Urges Prompt Settlements, 1243
 Pennsylvania Full Crew Law Repealed, 1057†,
 1085, 1465
 "Pennsylvania Standard," The, 775†
 People's Legislative Service, The, 1002
 Percentage of Wage Reductions Ordered, 1278
 Percentages, Traffic, Earnings and Expenses
 Shown in, 1334*
 Pere Marquette:
 Annual Report, 1307†*
 Roundhouse at New Buffalo, 543*, 1303†
 Roundhouse at Plymouth, Mich., Showing
 Fenestra Window Sash, 603*, 645
 Perez, Francisco: Mexican Railways Lease
 Equipment, 354†, 382
 Perishable Freight Claims in 1919, 493†
 Permanence in Railway Construction, 1254†
 Perpetuation of Weak Cars, 1315
 Personnel Problems (See also Training) 329,
 459, 719*, 1309*
 Perth Amboy Crossing Accident, 1465
 Peters, Mayor: Consolidation of New England
 Roads Opposed, 355†, 386
 Pfeleging, F. W.: Address Before Signal Sec-
 tion, 1303†, 1329
 Philadelphia & Reading:
 Bridge, Columbia, 369*
 Fuel Conservation Campaign, 733
 Wage Reductions, 810
 Philippines, Railways of, 374, 1293
 Phosphorus and Sulphur Note in Specifications,
 1440
 Physical Property, Additions Necessary to, 39*,
 703†
 Piece Work (See also Railroad Labor Board—
 National Agreements):
 Armstrong, G. W., on, 1157*, 1312
 Cook, C. C., on, 1253†, 1263
 Results of Abolition of, 297, 400†, 698†,
 776†, 823, 1223
 Track Work System, Standard, 1253†, 1263
 Piedmont Collision, 726
 Pier:
 Curtis Bay, Mechanical Trimmers for Han-
 dling Coal at; B. & O., 1433*
 Sewalls Point, Coal Handling at; Virginian,
 1207*
 Pilfering (See Thefts)
 Piling Material in Units, 1358
 Pipe, Culvert, with Reinforced Ends, 602*

Pittsburgh & Lake Erie: Painting, Bridge, Test
 of, 561*
 Pittsburgh Air Brake Club: Terminal Test to
 Secure Effective Grade Brakes, 1082
 Pittsburgh Testing Laboratory: Minwax Water-
 proofing, 605
 Plan for the Future Now, 744†
 Plumb Line Out of Plumb, A, 776†
 Plumb Plan in England, 917†
 Pneumatic Tie Tamping, Test to Determine Cost
 of; D. L. & W., 721
 Poland:
 Locomotives to Be Built, 529
 Railroad Notes, 304, 1293
 Police Departments, Reorganization of, 824†,
 833
 Port Commissioners Appointed, 1001
 Port of New York:
 Bixler, H. C., Transportation Engineer,
 1366
 Development of, 1103†, 1198†
 Merchants' Association Discusses, 1290
 Report of New York-New Jersey Commis-
 sion, 266†, 269*, 441†, 473
 Porter, Ind., Collision, 495*, 539†, 568, 775†,
 808*, 823†, 876†
 Portland, Ore.: Harriman Bridge, 1394*
 Portugal: Railroad Notes, 257
 Positive Rail Anchor Company: Girder Type
 Guard Rail, 647*
 Post Office to Pay Railroad Administration, 274,
 387
 Potential Danger Points, 775†, 808*, 823†
 Power Ballast Screen, 606*
 Power for Electric Traction, 1342, 1427†, 1441*
 Preparation and Distribution of Fuel, 1271
 Preparing for the Future, 965†
 Preservative (See Ties and Timber)
 President Harding:
 Appointments to I. C. C., 69†, 715*
 Barker, S. H., Proposes Government Ac-
 quire Freight Cars, 1131
 Brock, G. E. on Regional Boards, 932
 Conference with A. H. Smith, 463
 Conference with I. C. C., 1262
 Conferences with Labor and Security Own-
 ers' Representatives, 931
 Farmers' Organizations Demand Rate Re-
 duction, 1034
 Jewell, B. M. Appeals to, 902
 Railroad Situation, 849, 890, 931 (Address
 to Congress), 979, 1041, 1074
 Rate Reduction, 1262, 1337
 Reduction of Transportation Costs Urged,
 931
 Settlement of Government Accounts, 1466
 President Wilson:
 Employees' Requests Denied, 363
 Proclamation on Government Control, 276
 Winslow Bill Signed, 491†, 513
 President's Conference Committee (See Valu-
 ation)
 Pressed Steel Car Company:
 Annual Report, 531
 Virginian 120-Ton Gondola Cars, 401*
 Prices (See also Cost):
 All-Steel Freight Cars, 1910-1920, 536†, 555
 Car Repairs, 490†
 Cars and Locomotives, 87*
 Commodities and Freight Rates, 697†, 967†,
 979, 1126
 Engineering and Maintenance Material, 92*
 Freight Rates, Comparison with, 994, 1079
 Grading of New England Roads, 196*
 Iron and Steel, 89*, 92*
 Standard Railway Equipment, 89
 Tickets Show Fare; Pennsylvania, 300
 Ties, 221†
 Pringle, Col. J. W.: Abermule Collision, 1427†,
 1450
 Private Management on Trial, 538†
 Productive Efficiency and Wages, 1429†
 "Productive Efficiency" of Facilities and Em-
 ployees, 1152†
 Programs of Expenditures for 1921, 29*
 Progress of Missouri, Kansas & Texas Since
 1913, 1305†, 1321, 1385
 Progress Report on Superpower Survey, 727
 Promotion (See Employee)
 Propaganda in Belgium Against American Loco-
 motives, 442†, 462
 Providence Engineering Society: Electrifica-
 tion Results, 838
 Public's Representation on Labor Board, 777†
 Public and the Engineer, 577†
 Public—Grade Crossing Accidents, 1253†
 Public Service Commissions (See State)
 Public Versus the Railroads, 591
 Pueblo, Col., Floods at, 1341*, 1399*, 1427†
 Pullman Car Accident; D. & R. G., 812
 Pullman Car Remodeled with Sprinkling System
 for Weed Killing, 607*
 Pullman Company:
 Conductors Ask Wage Increases, 202
 Fare Hearing, 1463
 Shop Employees, Controversy with, 1336,
 1390, 1437 (Decision)
 Pulverized Fuel, Report on, 1235
 Pump for Storage of Gasoline, 1000*
 Purchases (See also American Railway Associa-
 tion):
 Business Basis, The, 180†
 Clayton Law—Section 10, 121, 178†, 191,
 208, 231, 250

Purchases (See also American Railway Associa-
 tion)—(Continued):
 Short Line Agency, 1213, 1401
 Stability of, 33*, 852
 Supply Organization, The, 223†, 268†, 279
 Ties, 221†
 Vast Purchases in 1920, 1304†
 Purchases and Stores Division (See American
 Railway Association)
 Purchasing Power of the Farmers, 491†
 Purdue Alumni Luncheon, 695*
 Pyrene Manufacturing Company:
 Fire Extinguisher, 605*
 Fireklok Fire Alarm, 774*

Q

Questionnaire, Regarding Use of Easement
 Curves, 917†, 933*

R

Rail:
 Anchors—the "Trak-Ankor" and Trasco
 "U" Spike, 600*
 Failures, Chart for Detecting, 696
 Girder Type Guard Rail, 647*
 Ingots, Sink-Head and Comparison, 333*
 Production in 1920, 597
 Report of A. R. E. A., on, 629*
 Section Chart, 599*
 Shattered Steel, 629
 Standard Sections in France, 1129*
 Tests with Head Down, 983
 Titanium Treated, Tests with, 1122
 Transverse Fissures and Mill Defects, 1013†,
 1029
 Wheel Burning, 832
 Rail-Head Piers for New Jersey, 473
 Railings, Safety, for Motor Cars, 645*
 Railroad a Composite Structure, A, 1153†
 Railroad Administration (See United States)
 Railroad Clubs Active, 777†
 Railroad Developments During 1920, 59*
 Railroad Hearings (See Senate Committee)
 Railroad Labor Board:
 Agreements Controversy, 1390, 1437
 Atlanta, Birmingham & Atlantic Case, 319,
 367, 411, 454, 520, 548, 710, 724, 811, 834,
 1036 (Decision), 1085
 Classification of Employees, 1173, 1411,
 1459
 Conferences on Wage Reductions, 453, 549,
 709, 810, 834
 Decision No. 147, 1254†, 1259 (abstract of),
 1278, 1305†, 1335, 1379†, 1419
 Employees Win Several Cases, 1437
 Erie Controversy, 412, 520, 547
 Exhibits of J. G. Walber, 1336
 Exhibits of W. J. Lauck, 899, 903, 938,
 1014†, 1015†, 1076, 1101†, 1113, 1139,
 1176
 Labor Unionism Versus Efficiency, 398†
 Members, 77*, 986*
 Missouri & North Arkansas Case, 454, 520,
 549, 726, 811, 859, 1465
 Missouri, Kansas & Texas Agreement, 1437
 National Agreements:
 Alexander, J. A., on 400†
 Clerks' Demand, 519, 876†
 Decision No. 119, 968†, 987 (text),
 1018†, 1240, 1390, 1437
 Fundamental Issues, 443†
 "Geer" Letter False, 1153†, 1174
 Hearings on, 79, 179†, 199, 223†, 243,
 297, 312†, 317, 356†, 363, 397†, 398†,
 411, 443†, 451, 489†, 519, 550, 723,
 776†, 777†, 803, 825†, 845, 899, 937,
 968†, 987 (Decision)
 Maintenance of Way Employees, 588, 725
 National Industrial Traffic League on,
 724, 902
 Obstacles in Recruiting Foremen, 354†
 Railway Executives on, 363, 579, 723,
 776†, 777†, 803, 845
 Refreshing Breeze, A, 698†
 Seniority Rule, The, 877†
 Signalmen's Agreement, 725
 Testimony on (See Railroad Labor
 Board—Testimony of)
 New York Central's Petition, 709, 846, 902
 Norfolk & Western Dispute, 126, 202, 412
 Pennsylvania Reduces Wages, 549, 710
 Percentages of Decreases Ordered, 1279
 President Declines Employees' Requests, 363
 "Productive Efficiency" of Facilities and
 Employees, 1152†
 Public's Representation on, 777†
 Pullman Conductors, 202
 Pullman Shop Employees, 1336, 1390, 1437
 Regional Boards, G. E. Brock on, 932
 St. Louis Southwestern Case, 903, 990
 Short Line Dispute, 846, 903, 1116
 Testimony of:
 Atterbury, W. W., 312†, 317, 363, 397†,
 805, 1153†, 1174
 Besler, W. G., 901
 Byram, H. E., 901
 Fitzgerald, E. H., 519
 Gray, C. R., 776†, 803
 Helt, D. W., 725
 Higgins, J. W., 1336

GENERAL INDEX—Continued

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

Railroad Labor Board (Continued):

- Jewell, B. M., 364, 398†, 411, 443†, 451, 549, 803, 845, 899, 937, 1075, 1153†, 1156†, 1174, 1336
 Lauck, W. J., 899, 903, 938, 1014†, 1015†, 1076, 1101†, 1113, 1139, 1176
 McManamy, Frank, 937
 Robinson, Bird M., 1116
 Sargent, F. W., 1114, 1379†, 1389
 Shaw, R. M., 1113
 Walber, J. G., 1114, 1335
 Walsh, Frank P., 443†, 451, 519, 723, 803, 1153†, 1174
 Whiter, E. T., 179†, 199, 223†, 243, 297, 366, 807, 1327
 Willard, Daniel, 428, 1176
 Wage Hearings, 988, 1075, 1101†, 1113, 1153†, 1156†, 1173, 1201†, 1240, 1254†, 1259 (Decision), 1278, 1305†, 1355, 1379†, 1381†, 1389, 1429†, 1437
 Wage Increases, Results of, 825†
 Wage Reduction Petitions, 846, 903, 1115, 1379†, 1389, 1437, 1438
 Wage Reductions on July 1, 1173, 1201†, 1240, 1254†, 1259 (Decision No. 147), 1278, 1305†, 1335, 1379†, 1419
 Wages for Unskilled Labor, 398†, 846
 Railroad Managers, Ideals of, 538†
 Railroad Plan of S. Davies Warfield, 793, 872†, 1448
 Railroad Problem:
 Clark, Edgar E., on, 857
 Dunn, S. O., on Solution of, 275, 538†
 Willard, Daniel, on, 427, 854
 Railroad Regulation (See Regulation; also Government Control)
 Railroad Situation (See also Railroad Problem):
 Dunn, S. O., on, 1233
 Parmelee, J. H., on, 377
 Ideals of Railroad Managers, 538†
 Investigation (See Senate Committee)
 Review of 1920, 59†
 Railway Accounting Officers' Association:
 Annual Meeting, 1101†, 1343*, 1379†, 1403
 Railway Business Association:
 Annual Meeting, 851
 Equipment Policies, Report on, 851
 Executive Committee Members, 1138
 Making or Breaking the Railways, 557
 Noxon, Frank W., on Payment of Guaranty, 235
 Selling Railway Supplies Abroad, 353†, 373
 Stabilize Railway Purchases, 33*, 852
 Willard, Daniel, Address of, 854
 Railway Car Manufacturers' Association:
 Car Deliveries in January, 737; February, 871†, 910; March, 1093; April, 1294
 Railway Dollar, Distribution of the, 807
 "Railway Management, Inadequacies of," 1014†
 Railway Mileage of the World, 367
 Railway Reconstruction (See Reconstruction)
 Railway Steel-Spring Company: Annual Report, 530
 Railway Supplies (See Foreign Trade)
 Railway Supply Manufacturers' Association:
 Exhibit at June Convention Abandoned, 535†, 567, 578†, 734, 873†
 Railways and the Universities, The, 651†, 688*
 "Rand S." Coaling Station and Cinder Plant, 607*, 644*, 646*
 Rapid Transit Development, 1171
 Rates:
 Argentina, Freight Rates in, 1197†
 Building Material, 1090, 1365
 Business Depression, Not Responsible for, 1126, 1279
 California Fruit Traffic, 1042
 Canadian Railways, Problem on, 112
 Coal, Lake Cargo, Reduced, 1089
 Commission Merchants, Attacks on, 967†, 1199†, 1201†
 Cost of Transportation in Relation to Other Cost Factors, 1079
 English Rate Committee's Report, 347
 Exchange Surcharge on Shipments Between U. S. and Canada, 250
 Florida Intrastate Rate Increases, 817
 Grain, Adjustment of, 882, 1089
 Great Britain, Increases in, 119
 Great Britain, Regulation in, 1199†, 1210
 Hallucination, A Strange, 873†
 Increases, Effect of, 60, 69*, 71*
 Increases in 1918 and 1920, 1334
 Increases, I. C. C. Ruling on, 816
 Intermountain Territory, I. C. C. on, 1034
 Mississippi Valley Case, 1188
 New England, Governors' Committee Opposes Rate Raise in, 527, 779†, 801, 1057†, 1071 (report)
 New England Roads Ask Larger Divisions, 296, 327, 387
 Passenger Traffic Under Increases, 70, 824†
 Prices, Comparison with, 994, 1079
 Railway Income Catechism, 557
 Rate-Making Under Transportation Act, 872†
 Reduction:
 Association of Railway Executives on, 1365
 Attitude of Railways, 1382†
 Carvell, Hon. F. B., on, 1132

Rates (Continued):

- Chairman Clark on, 546, 858, 936, 979, 1042, 1436
 Commodity Prices, 697†, 967†, 979, 1127
 Construction, Material Interests Urge, 1090, 1365
 Farmers' Organizations, Demands of, 1034
 Fruit and Vegetable, 1468
 Hoover, Herbert, on, 979, 1058†
 New England Traffic League Opposes, 1370
 Oklahoma, Ruling in, 1371
 President Confers with I. C. C., 1262
 President Harding's Attitude, 1337
 Railway Business Association on, 557
 Senators Introduce Bills, 1090
 Shippers Ask, 1371
 Sisson, Francis H., on, 1086, 1464
 Southern Roads Decline to Reduce Melon Rates, 1163
 Traffic Movement Restricted, 967†, 1202†
 Shipping Board Asks Re-establishment of, 717
 Smith, N. K., on, 206
 State Rates, Changes Allowed in, 909
 Texas Intrastate Rate Case, 504
 Traffic, Diminished, 1279
 Wage Reductions, 1201†
 Wages, Glenn E. Plumb on, 776†
 Western Live Stock Rates, Reduction Asked in, 409
 Wisconsin Rate Case, 470, 511, 716
 Rates Tribunal, English, 1199†, 1210
 Rating Existing Bridges, 650†, 654, 789*
 Ratio Scale, Railway Earnings on a, 1333*
 Rational Electrification of Steam Roads, 1037*
 Rawls Trackmower, 773*
 Rea, Samuel:
 New Year's Greeting, A, 209
 Partial Payments of Guaranty, 233
 Repairs in Outside Shops, 984
 Testimony Before Senate Committee, 1285
 Reading Dissolution Plan, 425, 443†, 535†, 1197†
 Recapture Clause of Transportation Act, 312†
 Receivership and Foreclosure Sales in 1920, 133
 Reclamation of Materials, 767, 1361
 Reclassification of Employees (See Classification)
 Reconstruction in France and Belgium, 871†, 879*, 966†, 973*, 1013†, 1020*, 1265*
 Reconstruction (See also Locomotive)
 Records and Accounts, A. R. E. A. on, 765*
 Redfield, W. C.: Foreign Trade, 1123
 Redflex Lens on Crossing Sign, 1168*
 Red Tap—"Commerce Reports," 1151†
 Reducing Forces (See Employee)
 Reduction (See Rates; also Employee—Wages)
 Refinite Company: Water Softening Plant at Yankton, S. D.; C. M. & St. P., 598*
 Refreshing Breeze, A, 698†
 Refrigerator Car (See Car, Freight)
 Regan Automatic Train Control Exhibited in France, 565*
 Regenerative Braking, 228, 230
 Regional Boards, G. E. Brock on, 932
 Regulation, Railroad (See also Government Control):
 Chamber of Commerce on, 1087
 Elliott, Howard, on, 1221, 1223
 Kahn, Otto H., on, 1087
 Illinois Legislation in, 1253†
 Reid Newfoundland Company:
 Locomotives, Pacific Type, 994*
 Return to Owner, 1411
 Reinforced Ends for Culvert Pipe, 602*
 Relays, Signal, 604*
 Relief Department: Pennsylvania, 1465
 Reminiscences of John F. Wallace, 691
 Repairs:
 Bad Order Car Situation, 1255†
 Cars on a Business Basis, 775†
 Cars, Steel Freight, 563, 698†
 Office Equipment: Pennsylvania, 1218
 Outside, A. H. Smith on, 1225
 Outside, I. C. C. Investigation of, 176†, 184, 291, 301, 479, 984, 1244, 1461
 Pennsylvania Locomotive, 1461
 Prices, Fixed, 490†
 Repair Shop Equipment Needs, 50*, 702†
 Repair Shop Work, Systematizing, 702†
 Report (See names of associations)
 Reproduction New (See Valuation)
 Residual Ductility: Tests on Rails, 630
 Resistance, Train, and Speed, 680*
 Results (See Senate Committee on Interstate Commerce—Hearings)
 Retrenchment, Railroad, 254, 301, 312†, 524, 744†
 Return to Capital and Labor from Railway Earnings, 1381†
 Revenues and Expenses:
 Average Revenue Per Ton and Per Passenger Per Mile, 1090
 Distribution of Railway Income, 807
 Effect of Rate Increases, 71*
 English Railways, 258, 571
 Freight Revenues, 1918-1921, 942
 M. K. & T., 1920, 1917 and 1913, 1386
 Monthly Detailed Figures: November, 210; December and Year 1920, 430; January, 813, 953; February, 948; March, 1133; April, 1412

Revenues and Expenses (Continued):

- Monthly Reports, 1917 to 1920, 478
 Monthly Summaries: September, 72; October, 72; November, 301; December and Year 1920, 467, 524; January, 947; February, 1002; March, 1244; April, 1418, 1466
 Northern Pacific, Results on, 1219
 Parmelee, J. H., on Year 1920, 129*
 Statistics of Class I Railways, 1911-1916, 1332
 Traffic, Earnings and Expenses Shown in Charts, 1333*
 Year 1920, 492†, 524
 Review of Year 1920, 3†, 59*
 Revolving Fund, Loans from, 62, 95*, 198
 Rhode Island: Moshassuck Valley Passenger Service Suspended, 1198†
 Rhodesia and Belgian Congo: Railroads, 374
 Richards, R. C., Presentation to, 253
 Rivet Set, Boyer, 774*
 Roadmasters' and Maintenance of Way Association: Exhibitors at Convention, 1467
 Roadway, A. R. E. A., Report on, 752*
 Roanoke, Va., Engine Terminal, N. & W., 1063*
 Robbery (See Train Robberies; also Thefts)
 Roberts & Schaefer Co.: "Rand S." Coaling Station and Cinder Plant, 607*, 644*, 646*
 Robinson, Bird M.:
 Partial Payments Urged, 235
 Short Line Railroad Association, 1164
 Testimony Before Labor Board, 1116
 Rock Island (See Chicago, Rock Island & Pacific)
 Rod, Grooved Point Sounding, 753*
 Rope, Wire, Qualities of, 1393
 Rough Handling of Passenger Trains, 226†, 971†
 Roumanian: Railroad Notes, 346, 1005, 1006, 1141, 1189
 Roundhouse (See Engine Terminals)
 Rules (See also National Agreements)
 Rules and Organization, A. R. E. A. Report on, 763*
 Rules and Unit Stresses for Rating Existing Bridges, 650†, 654
 Rules for Classification of Employees, 1459
 Rules Governing Equalization Accounts, 1438
 Russia: Railroad Notes, 528, 1421, 1469
 S
 Safety First (See also Accidents):
 Automobile Drivers; B. & O., 1183
 Baltimore & Ohio, 253
 Cathedism, 358†, 442†
 Chicago & North Western, 1038
 Chicago Great Western, 302, 1418
 Delaware & Hudson, 175†
 Electrical Hazards; N. Y. C., 1289
 Northwestern Pacific's Organization, 1218
 Southern Pacific, 385.
 Spirit of, 536†, 552
 Safety Hand Brake, Minich, 1464*
 Safety of Passengers in Steel Railway Cars, 781*
 Safety Railings for Motor Cars, 645*
 Safford, H. R.:
 Address Before A. R. E. A., 609†, 613*
 Purdue Alumni, Presentation of, 695*
 St. Louis Pump and Equipment Company:
 Storage Outfit for Gasoline, 1000*
 St. Louis-San Francisco: Restoration of Train Service—Order Held Invalid, 304
 St. Louis Southwestern: Wages Reduced, 903, 990
 Salary (See Officer)
 Salesman Without a Price, A., 1379†
 San Antonio & Aransas Pass: Crossing Sign, 478*
 San Francisco Bay, Marine Borers Invade Piling in, 399†, 420*
 San Francisco: Hetch Hetchy Railroad, 454
 Sao Paulo Railway of Brazil, 697†, 705*, 835*
 Sargent, F. W., Before Labor Board, 1115, 1379†, 1389
 Sargent, H. J.: Grading Report for New England Roads, 195†
 Sash, Fenestra Window, 603*
 Savings, Mr. Lauck's Estimated Possible, 1015†
 Scale-Proof Locomotive Crane Boiler, 1182*
 Schaefer's Crossing, Engine Terminal at N. & W., 1063*
 Schedule for Design of Terminal Buildings, 829*
 Schedule, Shop, 967†, 1318
 Schneider, Charles P. E., Awarded John Fritz Medal, 1367
 Scientific Treatment of Maintenance of Way Policy, 581
 Scrap Classification, 1398
 Scrap Reclamation, 767, 1361
 Screen, Power Ballast, 606*
 Seasonal Coal Rate Bill, 1159, 1467
 Seat, Smolar Car, 566*
 Section 10 of Clayton Law, 121, 178†, 191, 208, 250
 Securities, Attitude of Investors Toward, 53*
 Security Owners (See National Association)
 Selection of Foremen, 396†, 442†, 459, 536†, 650†, 676, 699†, 714
 Selection of Office Equipment; Penna., 1198†, 1215*
 Selection—The Employment Service, 329
 Self-Control, Simple Gospel of, 1156†
 Selling Railway Supplies Abroad, 353†, 373

Senate: Winslow Partial Payment Bill Passed, 477
 Senate Committee on Interstate Commerce:
 Clayton Law, Substitute for Section 10 of, 178†, 191, 208, 231, 250
 Co-ordinating Motor Trucks with Railroads, 1427†, 1457
 Hearings Before, 1102†, 1125, 1175, 1219, 1279, 1327, 1381†, 1395, 1445
 National Agreements, 1327, 1396
 President Confers with I. C. C., 1262
 Senator Cummins Proposes Railroad Investigation, 560, 700†, 734, 785, 940, 1001, 1002, 1074
 Testimony of:
 Byram, H. E., 1284
 Chambers, Edward, 1279
 Elliott, Howard, 1219
 Kruttschnitt, Julius, 1125
 Rea, Samuel, 1285
 Smith, A. H., 1178, 1223
 Walber, J. G., 1288, 1328
 Warfield, S. Davies, 1448
 Wettling, L. E., 1395, 1445
 Whiter, E. T., 1327, 1396
 Willard, Daniel, 1175, 1197†
 Williams, W. H., 1445
 Valuation Bill Hearing, 1418
 Senator Capper: Bill to Repeal 6 Per Cent Rule of Rate-Making, 1045
 Senator Cummins:
 Investigation of Railroad Situation (See Senate Committee)
 Loss During Federal Control, 1179
 Railroad Conditions, 785
 Senator Edge: Foreign Trade, 1124
 Senator Elkins Urges Public to Buy Coal, 1112
 Senator Frelinghuysen:
 Seasonal Coal Rate Bill, 1159, 1467
 Section 10 of Clayton Law, 121, 178†, 191, 208, 231, 250
 Senator Harris:
 Chairman Clark on Reducing Rates, 546
 Melon Rates, Southern Roads Decline to Reduce, 1163
 Senator La Follette:
 Information Wanted, 479
 "People's Legislative Service," 1002
 Seniority Rule, Plain Talk About, 876†
 Serbia: Railroad Notes, 346
 Service of Supply, The, 223†, 268†, 279
 Service Tests of a Substitute Tie, 252*
 Settlements (See Claims)
 Sewalls Point Pier, Coal Handling at; Virginian, 1199†, 1207*
 Shattered Steel in Fissured Rails, 629
 Shaughnessy, E. H., 993*
 Shaughnessy, Lord (See Lord Shaughnessy)
 Shaw, R. M., on Luck Exhibits, 1113
 Shed, Train, Removal of; B. & M., 1211*
 Ship Now, 1†, 9*, 16*
 Shipments, Fruit and Vegetable, 1402, 1468
 Shipper, Get Out and See the, 965†, 1156†
 Shippers, Ask Rate Reductions, 1371
 Shippers' Service Association Organized at St. Louis, 481
 Shippers' Viewpoint on Railroad Problem, 1040
 Shippers' Views on Increased Loading of Cars, 379
 Shipping Board Asks Re-establishment of Rates 717
 Shock Absorber for Refrigerator Cars, 340*
 Shoemaker, Harvey: Gap Crane, 521*
 Shop Delivery Plan, 280
 Shops:
 C. I. & L. at Lafayette, 1303†, 1325*
 Design, A. R. E. A. Report on, 684*
 Efficient Operation, A Call for, 175†
 Equipment Needs, 50*, 702†
 Foremen, Selection of, 396†, 442†, 459
 Crane, Gap, 521*
 Dunkirk, France, 1265*
 Morale of Shop Forces, 353†
 National Rules, 201
 Piece Work Systems, 297, 400†, 698†, 776†, 823†, 1253†, 1263
 Piece Work Versus Time-Rate, 1157
 Repairs, Outside, 176†, 184, 291, 301, 479, 984, 1225, 1244
 Schedule for Design of, 831
 Schedule Systems, 967†, 1318
 Speeding Up Production, 1317*
 Systematizing Work in, 702†
 Training Mechanics, 699†, 714
 Transportation Systems, 1057†, 1319
 Utilizing Present Equipment, 263†
 Shoup, Paul: Taxation; S. P., 1367
 Short Lines (See American Short Line Railroad Association)
 Shriners' Convention, Passenger Traffic to, 1419
 Sign:
 Crossing; C. M. & St. P., 1168*
 Crossing; S. A. & A. P., 478*
 Signal Appliance Association: Officers, 1332
 Signal Section (See American Railway Association)
 Signaling:
 Audible Signals and Automatic Train Control, 969†, 977
 Automatic and Train Operation, 703†
 Automatic Arrangement at Junctions and Crossings, 1165*
 Block Signals as Teachers, 221†
 Committee on, Economics of, 1303†, 1329

Signalling (Continued):

Construction in 1920, 160*
 Interlocking Plants Completed in 1920, 163
 Interlocking, Substituting Automatic Signals for, 1165*
 "Keep Trains Moving," 221†, 226†
 Light Signals, 1329
 Lights and Accidents, 1380†
 Location of Signals, 1303†, 1329
 Low-Voltage Switch Machines, 1077*
 Relays, A. C. and D. C., 604*
 Report of A. R. E. A. on, 627*
 Stop-and-Proceed Rule, The, 221†, 226†
 Take-Siding Signal, 1330
 Train-Order Signal, The, 876†
 Signalmen's National Agreement, 725
 Signs, A. R. E. A. Report on, 662*
 Silo Coal Pocket Plan, 648*
 Silver Lining of the Railway Cloud, 445†
 Simple Gospel of Self-Control, The, 1156†
 Sink-Head Ingots, Hadfield Type of, 333*
 Sisson, F. H., on Reducing Rates, 1086, 1464
 Sixteen Points (See Railroad Labor Board—National Agreements)
 "Small" Pocket Calculator, 774*
 Smith, A. H.:
 Conference with President-Elect Harding, 463
 Piece Work, Abolition of, 1223
 Security Owners' Conference with Brotherhood Leaders, 904, 928
 Testimony Before Senate Committee, 1178, 1223
 Smith, Dr. G. O.: Coal Depression, 841
 Smith, Milton H., Death of, 515*, 800
 Smith, N. K., on Higher Rates, 206
 Smock, J. C.: Maintenance of Way Agreement, 725
 Smolar Car Seat, 566*
 Snell Forestry Bill, 479
 Sodium Fluoride as a Preservative, 760
 Softening Plant (See Water)
 Solution of the Railroad Problem, S. O. Dunn on, 275, 538†
 South Africa:
 Electrification, 441†, 482, 886, 1143
 Railroad Notes, 304, 1469
 Van Alstyne, David, on Railways, 373
 South America (See also names of countries):
 Annual Reports of British Railways, 1190
 Southeastern Express Company, 209
 Southern Pacific:
 Hood, William, Retirement of, 1058†, 1100
 Kruttschnitt, Julius, Before Senate Committee, 1125, 1178
 Marine Borers Invade Piling in San Francisco Bay, 420*
 Safety First, 385
 Taxation, 1367
 Water Supply, Tucson Division, 1339*
 Southern Railway:
 District Claim Officers Established, 1089
 Vice-President Green on Reduction in Melon Rates, 1163
 Spain: Railroad Notes, 482
 Span (See Bridges and Buildings)
 Sparrow, W. W. K.: "Public Versus the Railroads," 591
 Specialties for All-Steel Freight Cars, 554
 Specifications for Buildings, 750*
 Specifications for Cross Ties, 443†, 475
 Speed and Brake Pipe Pressures; Virginian, 1409*
 Speed and Train Resistance, 680*, 1059†, 1083*
 Speeding Up Shop Production, 1317*
 Spike, Cut Track, 633*
 Spike, Trasco "U," 600*
 Spirals, Use of, 917†, 933*
 "Spirit of Safety First," 536†, 552
 Sprague Transportation Club: Officers, 734
 Spray Lining Equipment, 601*
 Sprinkling Unit for Weed Killing, 607*
 St. Gotthard Railroad, Electrification of, 1107*
 Stability of Railway Purchases, 33*, 852
 Stabilization of Coal Industry, 1160
 Standard Bridge Classification, 778†, 789*
 Standard of Car Maintenance, A, 699†
 Standard Locomotive for Argentine Railways, 722*
 Standard Rail Sections in France, 1129*
 Standard Tie Specifications, 443†, 475
 Standard Track Work System, 1264
 Standardization:
 Ballast Tools, 621*
 Freight Cars, 1317
 Loweth, C. F., on, 585
 Report of A. R. E. A. on, 686*
 Station Accounting Forms, 1352
 Wage Policy, 1288
 Standards of Fuel Economy, 1272
 Stark County Traffic Club Organized, 734
 State Commissions:
 Illinois: New Commission Proposed, 1253†
 New York:
 Annual Report, 286
 Automatic Stops, 497, 715
 Reorganization, 862, 928
 State Commission Rulings:
 California: Los Angeles Union Passenger Terminal, 1140
 Missouri: Restoration of Train Service; St. L.-S. F., 304

State Commission Rulings (Continued):

New Hampshire: Station Agencies Cut Out; B. & M., 735
 New Jersey: Grade Crossings in Paterson; Erie, 268†, 303
 Oklahoma: Rate Reductions, 1371
 Rhode Island: Moshassuck Valley Passenger Service Suspended, 1198†
 State Rate Case (See Wisconsin)
 State Rates, Changes Allowed in, 909
 Staten Island, Tunnel to, 1198†
 Station:
 Specification for Frame Passenger, 751*
 Track Layouts for Passenger, 771*
 Train Shed Removed; B. & M., at North Station, Boston, 1211*
 Valenciennes, France, 1266*
 Station Accounting Forms, 1353
 Station Agencies Cut Out; B. & M., 735
 Statistics (See also Revenues and Expenses; also Operating Statistics; also Freight Traffic; also Passenger Traffic):
 Wages and Cost of Living, 700†
 Steam and Electric Locomotives Compared, 1048
 Steel Plate Highway Crossing, 608*
 Steel, Shattered, in Fissured Rails, 629
 Stock (See Finance)
 Stocks of Coal, April 1, 1084
 Stoker (See Locomotive)
 Stop-and-Proceed Rule, The, 221†, 226†
 Stops, Train, Cost of, 1432†
 Storage of Coal, 1236
 Storage Outfit for Gasoline, 1000*
 Store Delivery of Material, 1359
 Store Door Delivery, 524, 1132, 1366
 Storer, N. W.: Electric Locomotives, 1048
 Stores (See also American Railway Association—Purchases and Stores; also Supply Department): Book of Rules, 1355
 Stresses in Track, A. R. E. A. Report on, 639*
 Stresses, Unit, and Rules for Rating Existing Bridges, 650†, 654
 Strike (See Employee)
 Stringer Designs for Wooden Trestles, 743†, 756*
 Structural Improvement of Freight Cars, 917†
 Subordinate Officers, Organizations of, 180†
 Subsidence and Shrinkage of Embankments, 753*
 Substitute for Section 10 of Clayton Act, Hearings on, 178†, 191, 208, 231, 250
 Substitute Tie, Service Tests of a, 252*
 Sulphuric Acid Tank Cars, 203*, 400†, 489†
 Superpower Survey, Progress Report on, 727
 Supervision:
 Foreman, The, 396†, 442†, 459
 Labor, 400†
 Loss and Damage Prevention, 1013†
 Maintenance of Way Department, 177†, 265†, 311†
 Repairs to Steel Freight Cars, 563
 Supplies, Railway (See Foreign Trade)
 Supply Department, The, 223†, 268†, 279
 Supply Industry, Effect of Deferred Payments of Guaranty on, 235
 Supply Man, Co-operation with, 701†
 Supply Train Operation, 1361
 Supreme Court (See Legal Decisions)
 Surcharge on Shipments Between U. S. and Canada, 250
 Suspension, Duplex Compensating, 850*
 Swedish State Railways: Bearings, Anti-Friction, 971†
 Swing Spans, 1392
 Switch Machines, Low-Voltage, 1077*
 Switch Stand Connecting Rods, 635*
 Switzerland:
 Electrification of St. Gotthard Line, 1107*
 Railroad Notes, 257, 1245
 Syphons, Nicholson Thermic, 449*, 885*
 Systematizing Work in Repair Shops, 702†

T

Take-Siding Signal 1330
 Tamping, Pneumatic Tie, Cost of, 721
 Tandem Dumping Machine at Sewalls Point Pier; Virginian, 1207*
 Tank Car, General Chemical, 203*, 400†
 Tank Car Shipments of Sulphuric Acid, 489†
 Tank, Storage, for Gasoline, 1000*
 Taxation: Highway Construction, 1420, 1428†, 1468
 Taxation; Southern Pacific, 1367
 Tax Returns from Railway Employee, 812
 Taxes Upon Transportation, 1428†
 Taylor, L. S.: Pullman Fare Hearing, 1463
 Telegraph and Telephone Construction in 1920, 164
 Telegraph Department; C. R. I. & P., 1101†
 Telegraph Negligence, Liability for, 1245
 Telephones for Bettering Train Movements, 441†, 1019†
 Telescoping of Steel Cars, 781*
 Tender Wheel Drop Pits, 1254†, 1320
 Tennessee: Grading Crossings, Law to Eliminate, 1001
 Tentative Valuations, 75
 Terebo (See Marine Borers)
 Terminal (See Yards and Terminals; also Engine Terminals)
 Terminal Companies' Accounts, Report on, 1406
 Terminal Test to Secure Effective Grade Brakes, 1083
 Test, the Acid, 776†

GENERAL INDEX—Continued

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

- Test Tie Sections, 660
 Testimony (See Railroad Labor Board; also Senate Committee)
 Tests (See also American Society for Testing Materials):
 Airbrake, Westinghouse; Virginian, 1199†, 1206*, 1407*
 Automatic Control of Locomotive Cut-Off; C. C. C. & St. L., 1451*
 Container Car for Mail; N. Y. C., 1128*
 Cost of Pneumatic Tie Tamping, 721
 Franklin Power Reverse Gear, 1043*
 Minwax Waterproofing, 605
 Painting of Steel Bridges; P. & L. E., 561*
 Rails, Drop Tests on; N. Y. C., 630
 Rails Tested Head Down, 983
 Stoker Fired Locomotive; Erie, 708
 Terminal Test to Secure Effective Grade Brakes, 1082
 Timber, Interpretation of, 1440
 Titanium Treated Rails, 1122
 Train Resistance, 1059†, 1083*
 Texaco Asphalt Mastic on Barge Floors; Pennsylvania, 1181*
 Texarkana & Fort Smith: Assessment for Highway Construction, 1420, 1428†
 Texas & Pacific: Weed Burner, 1033*
 Texas Intrastate Rate Case, 504
 Thefts:
 Freight Claims, B. & M., 1138
 French Railways, Cost to, 1293
 Mail, 1411
 Prevention of, 824†, 883
 Train Robberies, 567, 812
 Thom, Alfred P. (See also Association of Railway Executives): Partial Payments of Guaranty, 233
 Thorne System of Purchasing Supplies, 279
 Three Epochs of American History, 854
 Tickets:
 Advice to Ticket Sellers, 860
 Cash Fare Penalty; Pennsylvania, 946
 Commutation, Misuse of; L. I., 1131
 Prices on; Pennsylvania, 300
 Ties and Timber (See also American Wood Preservers' Association):
 A. R. E. A. Report on, 650†, 658*
 Cross Tie, 45 Years from; A. & V., 590
 Durability of Western Ties, 996
 Foley, John, on Future Supply, 301
 Marine Borers, A. R. E. A. Report on, 744†, 760
 Marine Borers Invade Piling in San Francisco Bay, 399†, 420*
 "Peerless" Steel Tie, 252*
 Preservation, A. R. E. A. Report on, 744†, 759*
 Snell Forestry Bill, 479
 Specifications for Ties, 443†, 475, 658
 Test Tie Sections, 660
 Tests, Interpretation of, 1440
 Tie Producer, the Small, 221†
 Treated Ties Operating Cost, 1303†
 Tilting Cradle Unloader, 999†
 Time-Rate System of Pay, 1157*, 1312
 Time-Table of Kushequa Route, 1186
 Titanium Treated Rails, Tests with, 1122
 Tons Carried (See Freight Traffic)
 Track:
 A. R. E. A. Report on, 633*
 Easement Curves, Use of, 917†, 933*
 Layouts for a Dead-End Passenger Station, a Through Passenger Station and Ladder Tracks, 771*
 Maintenance, Uniform, 918†
 Material Report, Monthly, 766
 Mower for Motor Cars, 773*
 Spike, Cut, 633*
 Spike, Trasco "U", 600*
 Stresses, A. R. E. A. Report on, 639*
 Track Circuits, D. C., 1331
 Track Scale Floor, Weatherproof, 645*
 Track Specialties Company: "Trak-Ankor" and Trasco "U" Spike, 600*
 Track Supply Association: Exhibitors at Roadmasters' Convention, 1467
 Track Work System, Standard, 1263
 Traction, Electric Power for, 1342, 1427†, 1441*
 Tractor (See Truck)
 Traffic (See also Freight Traffic; also Passenger Traffic; also Operating Statistics):
 Automobile, 565†
 Coal; Virginian, 1197†, 1199†, 1203*
 Decline in, 441†, 445†, 535†, 941*, 965†, 1224, 1279
 Earnings, Relationship Between, 1333*
 Freight Rates Restricting Movement, 967†, 1202†
 Grain, Last Year's, 569
 Improved Facilities Needed, 39*, 703†
 Mexican, 395†, 1202†
 Motor Transport, 1427†, 1457
 Panama Canal a Factor, 777†
 Rates, Restoring Old, 873†
 Ship Now—Prospective Traffic in 1921, 1†, 9*, 16*
 Shipments, Fruit and Vegetable, 1402, 1468
 Shipper, See the, 965†, 1156†
 Slump Worst in History, 941*
 Statistics (See Freight; also Passenger)
 Traffic Capacity, Increasing the, 679
 Traffic Club of Pittsburgh: Otto H. Kahn on Railroad Regulation, 1087
 Traffic Statistics (See Freight Traffic; also Passenger Traffic)
 Train and Enginemen's Individual Progress Report, 719*
 Train Control (See Automatic)
 Train Dispatching: Telephones; M. V., 1411
 Train Handling with Electric Locomotives, 227*, 323*, 455*
 Train Loading Record; Virginian, 1199†, 1203*, 1407*
 Train Movements (See also Signaling):
 Bettered by Telephone, 441†, 1019†
 Low-Voltage Switch Machines, 1077*
 Stop-and-Proceed Rule, 221†, 226†
 Train Operation and Automatic Signals, 703†
 Train Operation and Automatic Train Control, 969†, 977
 Train Operation, Cost of, 1086, 1183, 1411
 Train-Order Signal, Problem of, 876†
 Train Resistance and Speed, 680*, 1059†, 1083*
 Train Robberies (See also Thefts), 567, 812
 Train Shed Removed; B. & M., 1211*
 Train Speed on Energy Consumption, Effect of, 1059†, 1083†
 Train Stops, Cost of, 1432†
 Trains, Jerking of, 226†
 Trains—Keep Moving, 221†, 226†
 Trains, Passenger, Rough Handling of, 226†, 971†
 Trains On Time; I. C., 524
 Training Men, J. C. Clark on, 719*
 Training Plans on English Railway, 1092
 Training of Engine Crew, 1239
 Training of Foremen, 396†, 442†, 459, 536†, 650†, 676, 699†, 714, 1309
 Training Shop Mechanics, 699†, 714
 Trainmaster's Most Useful Function, The, 353†
 "Trak-Ankor," The, 600*
 Transandine Railway of Chile, 266†, 282*
 Transition Curves in Use, 917†, 933*
 Transportation Act:
 Constructive Work by I. C. C., 5†
 Cuyler, Thomas De Witt, on, 1125
 Elliott, Howard, on, 1219
 Investigation of Railroad Situation, 560
 Loan Fund, Provisions for, 62, 96
 Plan of S. Davies Warfield, 872†
 Rate Making Under, 872†
 Recapture Clause, The, 312†
 States Attack Constitutionality of, 470, 511
 U. S. Chamber of Commerce on, 1039
 Willard, Daniel, on, 854, 1175
 Transportation Club of Peoria:
 Officers Elected, 734
 Transporting Material in Shops, 1057†
 Transportation Conditions During Year 1920, 63*
 Transportation Economics, 918†
 Transverse Fissures (See Rail)
 Trasco "U" Spike, 600*
 Treat Ties, Why All Roads Do Not, 1303†
 Tree Planting from Railway Standpoint, 768
 Trend Curves:
 Building Costs, 750*
 Grading of New England Roads, 195*
 Railway Earnings, H. M. Sperry on, 1332*
 Stock and Bond Prices, 1912 to 1920, 54*
 Trestles, Wooden, A. R. E. A. Report on, 743†, 756*
 Tri-City Steel Company:
 "Peerless" Steel Tie, 252*
 Trimmers, Mechanical, for Handling Coal at Curtis Bay Pier; B. & O., 1433*
 Truck:
 Baker, with Duplex Suspension, 850*
 Buckeye Six-Wheel, 405*, 1269*
 Karry Lode, 773*
 Lamont, 403*
 Lewis, 405*
 Six-Wheel; N. & W., 917†, 923*
 Trucking Facilities, Engine Terminal, 1320, 1380†
 Trueblood, J. D.: Salaries of Engineers, 591
 Tryon, F. G.: Coal Depression, 841
 Tucson Division, Water Supply; S. P., 1339*
 Tungsten Lamp Standards—1920, 626
 Tunnel:
 Reconstruction in France, 966†, 973*
 Staten Island, 1198†
- U**
- Underground Conduit Construction, 625
 Uniform Maintenance of Track, 918†
 Union Pacific:
 Piece Work Pay, Abolition of, 297
 Unification of Terminals, 1170
 Unit Piling of Material, 1358
 Unit Stresses for Rating Existing Bridges, 650†, 654
 United Engineering Society: Officers, 385
 United Railways of Havana: Locomotives, 897*
- United States Chamber of Commerce (See Chamber)
 United States Railroad Administration (See also Government Control):
 Davis, James C., Director General, 862
 Innovations, Fate of, 81*
 Loss from Railroad Operation, 1120
 Post Office to Pay, 274, 387
 Settlements with Railroads, 73, 1120, 1328, 1466
 Wage Orders, J. G. Walber on, 1288
 University and the A. R. E. A., The, 651†, 688*
 University of Illinois:
 Co-operation with A. R. E. A., 651†, 688*
 Train resistance Tests, 1059†, 1083*
 Unloader, Tilting Cradle, 999*
 Unskilled Labor, 549, 567
- V**
- Valenciennes Station, 1266*
 Valuation:
 Amendment of Act Proposed, 282, 1418
 Atlanta, Birmingham & Atlantic, 887
 Chicago, Terre Haute & Southeastern, 1366
 Cost of Reproduction New of All-Steel Freight Cars, 536†, 553*
 Deficiency Appropriation Bill, 480
 Developments in 1920, 74*
 Final on Four Railroads, 887
 Grading of New England Roads, 195*
 I. C. C.'s Methods of Fixing, 299
 Kansas City Southern, 74, 887, 1087
 Los Angeles & Salt Lake, 887, 1087
 Protests Against, 889, 1087, 1132
 Signal Section's Report on, 1330
 Winston-Salem Southbound, 887
 Vauxaillon Tunnel, 975*
 Verona Tool Works Reorganized, 216
 Vertical Lift Bridges, 1391*
 Villeneuve Bridge Reconstructed, 880*
 Virginian:
 Air Brake Tests, Westinghouse, 1206*, 1407*
 Car, 120-Ton Gondola, 401*, 556, 729*, 1199†, 1203* (Test Train Run), 1269*
 (Buckeye Six-Wheel Trucks), 1407*
 Operating Study—Record Train Loading—Coal Business, 1197† 1199†, 1203*
 Vitalizing Locomotives, G. M. Basford on, 1227*
 Voluntary Relief Department; Pennsylvania, 1465
- W**
- Wabash: Annual Report, 1103†*
 Walber, J. G.:
 Testimony Before Labor Board, 1114, 1335
 Testimony Before Senate Committee, 1288, 1328
 Wallace, J. F.: Reminiscences of, 691
 Wallace, John F.: Terminal Plans for Chicago, 891*
 Walsh, Frank P.: National Agreements, 443†, 451, 519, 723, 803, 1153†, 1174
 War Department to Pay Railroads, 947
 Warfield, S. Davies:
 Board of Economics and Engineering, 1364, 1383†, 1449
 Conference with President Harding, 931
 Railroad Plan, 793, 872†, 1448
 Security Owners Confer with Brotherhood Leaders, 904, 928
 Testimony Before Senate Committee, 1448
 Washington, D. C. Traffic Club:
 Optimistic View of Railway Situation, 377
 Waste, Committee on Elimination of, 436, 1367, 1380†
 Water Ashpits, Pros and Cons of, 1101†
 Water—Gas—Tar as a Preservative, 760
 Watermelon (See Melon Rates)
 Water Power, A. R. E. A. Report on, 624
 Waterproofing, A. R. E. A. Report on, 654
 Waterproofing to Protect Concrete, 1151†
 Water Service, A. R. E. A. Report on, 670*
 Water Softening Plant at Yankton, S. D.; C. M. & St. P., 598*
 Water Softening Plant, Graver, 600*
 Water Stations on Tucson Division; Southern Pacific, 1339*
 Water Treatment; C. R. I. & P., 247*
 Water Terminal, Freight Conveyor at, 522*
 Wear Tests of Concrete, 1440
 Weatherproof Track Scale Floor, 645*
 Weed Killing:
 Burner; Texas & Pacific, 1033*
 Sprinkling Unit, Pullman Car, 607*
 Track Mower for Motor Cars, 773*
 Weekly Reports (See Car Service—Loading)
 Weighted Averages of All-Steel Freight Cars, 536†, 553*
 Welch, W. Va., Collision, 1418
 Welding, Bonus Payment for, 353†
 Welfare Campaign Among Mexican Laborers, 1026
 Western Electric Company: Annual Report, 820

Western Live Stock Rates, Reduction Asked in, 409
 Western Maryland: Locomotive, Consolidation, 1117*
 Western Pacific: Board of Referees May Consider Maintenance Claims, 94
 Western Railway Club:
 Condition of Freight Cars, 293
 Foreman, The, 442†, 459, 536†, 699†, 714
 Western Roads Answer Lauck's Charges, 1101†, 1113
 Western Society of Engineers:
 Maximum Service from Old Bridges, 789*
 Terminal Problem, 1169
 Western Ties, Durability of, 996
 Western Union Wires on L. & N., 568
 Westinghouse Air Brake Company:
 Annual Report, 912
 France, Brakes Used in, 571
 Tests on Virginian, 1199†, 1206*, 1407*
 Westinghouse Electric & Manufacturing Company: Annual Report, 1375
 Westinghouse Electric Locomotives, Dimensions of, 227*
 Western Society of Engineers:
 Tie Supply of Future, 301
 Wetling, L. E.: Testimony Before Senate Committee, 1395, 1445

Wheel Burning Injures Rail, 832
 Wheels, Cast-Iron, Failures of, 1439
 Whiter, E. T.:
 National Agreements, 179†, 199, 223†, 243, 297, 807, 1327
 Testimony Before Senate Committee, 1327, 1396
 Whitney, Neb., Bridge Disaster, 1466
 Willard, Daniel:
 Partial Payments of Guaranty, 234
 Testimony Before Senate Committee, 1175, 1197†
 Williams, W. H., Before Senate Committee, 1445
 Window Sash, Fenestra, 603*, 645
 Winslow Bill for Partial Payment of Guaranty, 193, 208, 233, 249, 277, 326, 383, 477, 491†, 513 (signed by President Wilson), 565, 718, 812, 1285
 Winston-Salem Southbound: Valuation, 887
 Wire Rope, Qualities of, 1393
 Wireless Telegraph; L. & N., 253
 Wisconsin Rate Case, 470, 511, 716
 Wood Preservers' Association: Convention, 321
 Wood Preservation, A. R. E. A. on, 744†, 759*
 Wooden Trestles, A. R. E. A. Report on, 743†, 756*
 Working Rules (See Railroad Labor Board—National Agreements)
 World's Railway Mileage, The, 367

Y

Yankton, S. D.: Water Softening Plant; C. M. & St. P., 598*
 Yards and Terminals (See also Engine Terminals):
 Chicago, Plans for, 891*, 1169
 Classification at Initial Terminal, 493†, 969†, 971†
 Cleveland Passenger Terminal Planned, 498
 Design of Modern Engine Terminals, 829*
 Dunkirk, France, 1265*
 Enginehouse (See Engine Terminals)
 Improvements Needed, 39*
 Lille-la-Delivrance, France, 1265*
 Locomotive Terminal Development, 176†
 Los Angeles Union Terminal, 1140
 New York-New Jersey Terminal Problems, 266†, 269*, 441†, 473
 Pere Marquette at New Buffalo, 543*
 Report of A. R. E. A., 769*
 Shaughnessy, E. H. on Terminal Operation, 969†, 971†
 Terminal Problem Discussed, 1169
 Unification, J. H. Brinkerhoff on, 1170
 Year 1920 Reviewed, 3†, 59*
 Y. M. C. A.: Welfare Campaign Among Mexican Laborers, 1026
 Young, Joseph H., 1027*
 Youngstown Branch Bridge: Paint Test, 561*

NEW BOOKS

British Railways and the Great War, Part 1, 971
 Economic Development of the United States, 1258
 Engineering Index for 1919, The, 313
 Fuel Oil in Industry, 399
 Handbook of Building Construction, 1018
 Maintenance of Way Cyclopedia, 492

Making, Shaping and Treating of Steel, The, 314
 Ocean Steamship Traffic Management, 314
 Proceedings of the American Society for Testing Materials for 1920, 268
 Proceedings of the Telegraph & Telephone Section, 1431
 Proceedings of the Thirtieth Annual Convention of the American Railway Bridge & Building Association, 1155

Railway Accounting Officers' Association 1921 Synopsis, 1383
 Railway Surveying and Permanent Way Work, 357
 Roadway and Track, 1431
 Steam Locomotives of the Present Time, 542
 Straight Business in South America, 493

ELECTIONS AND APPOINTMENTS

[*Indicates photograph and sketch. ‡Indicates sketch only.]

Abbott, G. W., 742
 Acost, C. J., 741
 Acworth, William M., 385
 Adams, C. E., 217
 Adams, H. A., 219*
 Adams, O. J., 1426
 Adair, C. L., 264
 Adsit, J. S., 961
 Agnew, D. W., 1474
 Ashton, R. H., 58*
 Aldrich, William, 1471
 Alger, Richard W., 738
 Allen, H. E., 1055
 Allen, H. M., 394
 Allen, L. M., 256
 Allen, Stuart A., 822, 963*
 Allerton, A., 220
 Ames, C. T., 1055
 Amy, H. A., 394
 Anderson, J. D., 220
 Anderson, J. F., 1098
 Anderson, W. H., 352
 Andrews, W. H., 916
 Angus, D. J., 1422
 Appleton, J. B., 1471
 Archbold, H. L., 1150
 Archer, Parks C., 440*
 Arnum, B., 393
 Austin, W. L., 390

Bachrach, Harry, 735
 Bacon, John L., 389
 Bailey, A. R., 962
 Baird, John B., 220
 Ballantyne, G. H., 870
 Bamford, W. B., 963
 Banks, L. B., 1099, 1195
 Barbee, H. G., 1008
 Barelli, J. S., 530
 Barker, Alexander C., 530
 Barker, N. M., 1375
 Barlow, R. A., 1150
 Barnes, R. W., 1150
 Barnwell, W. C., 309
 Barry, G. R., 962, 964
 Bassett, William H., 911*
 Baughn, V. C., 962
 Baur, F. X., 862
 Baxter, Hamilton, 963
 Bayne, Howard, 1052
 Bayne, Jasper, 1052
 Beason, Ross, 822, 961*
 Beaver, J. D., 219
 Beckwith, E. C., 962
 Beeuwkes, Reinier, 1378
 Bell, B. A., 389
 Bender, C. H., 393
 Bernard, A., 961
 Bernier, J. A., 1370
 Berry, H. H., 869
 Bessling, E. N., 253
 Bettcher, Carl W., 819
 Bevington, W. C., 174

Bibbins, J. R., 907*
 Bickel, H. E., 916
 Bigelow, George S., 171
 Billingsley, W. F., 390
 Bilster, Raymond R., 1143
 Bischoff, H. S., 1056
 Bischoff, M. L., 742
 Bixler, H. C., 1366†
 Black, E. A., 1100
 Blackaller, W. H., 393
 Blaisie, J. F., 1012
 Blackley, Henry, 220
 Blakely, J. B., 220†
 Blakeslee, Charles G., 1004
 Blakesley, R. L., 173
 Bland, C. H., 1149
 Blanton, George J., 438
 Blecker, W. H., Jr., 1375
 Bloodgood, E. J., 174
 Bloom, J. G., 1055, 1056
 Boatner, V. V., 1378, 1425*
 Bodamer, E., 1378, 1474†
 Bole, Robert A., 956*
 Bond, T. T., 389
 Bonner, G. E., 916
 Boucher, W. R., 309
 Boughton, V. T., 1149
 Boyce, William S., 171
 Boyd, G. E., 1252
 Boyd, Oliver G., 1143
 Braden, P. F., 1195
 Bradish, L. M., 352
 Bradley, A. C., 1056
 Bradley, G. W., 962
 Bradley, W. E., 264
 Brahan, T. W., 310
 Bravand, R. J., 484
 Bray, J. W., 963
 Brenner, Norman T., 1094
 Brigham, C. F., 863
 Briney, Mark R., 1094
 Brinkley, F. T., 870
 Britt, J. W., 1378
 Broadus, M., 576, 962
 Brosius, C. W., 263, 264
 Brostedt, A., 440
 Browder, C. W., 263
 Brown, A. E., 437
 Brown, E. W., 1098
 Brown, H. C., 911
 Brown, H. M., 174
 Brown, T. L., 1098, 1195
 Brown, W. E., 1056
 Browne, N. O., 1056
 Brundige, Harley W., 1188
 Bruner, J., 915
 Buchanan, H. G., 963
 Buck, G. A., 1150
 Burel, W. C., 440
 Burkholder, C. J., 264
 Burnett, Edmund T., 264†
 Burns, I. J., 1195
 Burns, W. H., 309, 352*

Burnett, W. E., Jr., 962
 Burton, R. J., 957
 Bush, R. G., 822
 Butler, W. R., 822
 Cabell, F. I., 964
 Cain, Homer, 263
 Cain, James W., 1402†
 Cairns, C. A., 256
 Calder, A. B., 487*
 Caldwell, Frank C., 1471
 Callaway, W. R., 263
 Cameron, E. W., 1099
 Campbell, A. McL., 1252
 Campbell, C. G., 962
 Campbell, J. B., 1049, 1091*
 Campbell, J. L., 693*
 Campbell, J. N., 1301
 Campbell, P. G., 1195
 Caracristi, V. Z., 1191*
 Carey, J. H., 963
 Carleton, R. H., 393
 Carter, Z. W., 438
 Cartwright, W. J., 1099
 Cathcart, W. C., 310
 Chamberlin, Charles M., 911
 Champlin, D. W., 870
 Chancellor, C. D., 263, 352†
 Chandler, J. W., 264
 Chapman, E. E., 742
 Chateaufort, R. W., 963
 Chittenden, W. A., 1426
 Christian, F. H., 534
 Chumley, C. M., 1301
 Clarahan, L. E., 1474
 Clark, Edgar E., 128*, 1465, 1466
 Clark, Frank H., 259
 Clark, G. W., 259
 Clague, E. S., 440
 Clement, C. F., 263
 Clements, J. G., 309†
 Cleveland, O. D., 738
 Clifford, J. O., 174
 Clopper, Herbert G., 1052
 Close, J. L., 1098
 Coady, Charles P., 388
 Coburn, Ralph G., 172, 912*
 Code, J. G., 264
 Cole, C. B., 1051
 Coleman, J. F., 488
 Collins, O., 1196
 Collyer, R. N., 869
 Comstock, H. O., 259
 Connelly, P. C., 220
 Connors, Fred C., 911
 Connor, W. C., 488
 Connor, W. C., Jr., 393
 Connors, J. J., 870, 1051
 Conrad, E. B., 1149
 Conrad, Frank, 306*
 Cook, C. E., 1008
 Cook, F. L., 259
 Cook, W. D., 822, 1150, 1474

Cooley, M. W., 1149
 Coomes, C. E., 534, 741*
 Cooper, Ralph S., 1247
 Correll, H. E., 1055
 Cotner, James A., 957
 Coulston, Melvin H., 253
 Coursen, W. L., 1474
 Courtney, J. E., 488
 Cowan, R. S., 1143
 Cowley, J. P., 393
 Coyne, O. E., 869, 1099†
 Crane, H. B., 576
 Cromwell, O. C., 440
 Cronk, C. D., 1100
 Cross, C. W., 1422
 Crotty, M. J., 174
 Cummins, W. E., 1195
 Cunningham, C. C., 394
 Cunningham, M. P., 310
 Curtis, J. H., 534
 Curtis, W. J., 534
 Cutler, William F., 260†
 Cutting, E. M., 307*

Dager, G. D., 1474
 Daley, C. A., 1196
 Dallam, L. R., 1008
 Dalton, E. L., 1370
 Dalton, H. J., 393
 Danvers, W. E., 1056
 Darling, J. P., 534
 Darrah, W. H., 171
 Dayant, T. S., 219†
 Davis, C. M., 174
 Davis, D. W., 1098
 Davis, G., 1056
 Davis, James, C., 862†
 Davis, J. M., 1094*
 Davis, Robert W., 1301†
 Davison, H. M., 1051
 Dawkins, W. C., 911
 Dean, W. E., 390
 De Butts, H. A., 1378
 Degan, W. V., 862
 Deickman, J. H., 216
 De Lambert, G. M., 742
 De Lancy, H. J., 572
 Denning, William I., 1183
 De Pue, G. T., 964
 De Ramus, L. F., 1378
 Desmond, J. J., 1301
 De Vausney, L. M., 1052
 Deveny, F. S., 1149
 Deveny, Frank D., 220
 Devlin, Frank R., 1188
 Devoe, L. H., 738
 Dewar, J., 352
 Dexheimer, C. H., 390
 Dickinson, H. E., 310
 Dinkins, H. C., 1426
 Ditman, F. W., 962
 Dobbins, D. C., 1150
 Dodd, Theodore L., 389

ELECTIONS AND APPOINTMENTS—Continued

[*Indicates photograph and sketch. ‡Indicates sketch only.]

- Dodge, A. H., 1471
Dodge, Carlton R., 530
Dodge, F. D., 1474
Dolan, J. A., 534, 741, 869
Donaldson, G. S., 1474
Dorflinger, C. W., 534
Dorner, Fred H., 1051
Doscher, E., 1471
Downs, L. A., 693*
Doyle, J. M., 1252
Doyle, T. L., 964
Drazy, C. H., 576
Duckworth, C., 310
Dudley, A. M., 962
Dudley, S. W., 349*, 389
Duesenberry, J. F., 572
Duff, W. A., 1012
Duffield, L. R., 1375
Duncan, James, 715
Dunn, Samuel O., 1465
Dutton, Andrew, 173
- Eames, Robert M., 306
Eckles, Wilber, 1143
Eckert, Wm., 1295
Edwards, W., 1378
Eidenmiller, A. L., 1474
Eissler, R. F., 171
Elder, F. W., 1150
Elder, S. W., 822
Ellington, J. W., 741
Elliott, H. S., 1252
Elliott, W. S., 869
Emery, E., 390*
Emrich, M. F., 438
England, Alexander, 389, 437*
England, H. J., 352
Englebright, E. W., 912
Ennes, Stanton, 173, 961
Erby, John H., 1422
Esch, J. J., 715*, 1004
Estabrook, S. M., 173
Esterline, J. W., 1422
Etter, W. K., 961, 964, 1099‡
Evans, Harry M., 348*
Evans, W. L., 174
Ewing, H. J., 1195
- Fagan, F. D., 307*
Fahey, J. A., 962
Fairbairn, J. M. R., 1465
Fairchild, D., 264
Farley, D. S., 964, 1055, 1099*
Farrell, A. M., 310, 394*
Farrell, J. F., 530
Feiker, F. M., 1183
Fenstermaker, D. C., 964, 1100
Finnell, Harry W., 1247‡
Fisher, E. P., 534
Fisher, T. W., 264
Fitzgerald, J. E., 530
Fitzgerald, William, 576
Fitzsimmons, W. E., 742
Flynn, J. B., 1008
Ford, Henry, 576
Ford, Henry J., 715
Ford, J. N., 961
Forrest, C. A., 174
Forsythe, Homer J., 1143
Foster, W. J., 1196
Fox, J. H., 393, 963
Fox, J. S., 174
Frankenberger, A. L., 911
Freeman, E. G., 394
Freeman, Frank H., 863
Freeman, Leon S., 957
Freeman, Southgate B., 957
Fuchs, Richard, 440
- Gahan, G. C., 741, 869‡
Gallagher, R. D., Jr., 1143
Gallinger, C., 390
Gardner, C. C., 1195
Gardner, E. R., 963
Gargan, H. M., 309, 352‡
Garner, L. A., 869
Garsaud, Marcel, 530
Gayle, J. M., 1055
Geddes, Sir Eric, 1005
Geibel, F. E., 174, 220
Geiger, George, 915
Gent, L. W., 310
Gerard, William, 579
Gerdes, Henry T., 1375
Garety, D. P., 174, 915
Gerety, J. C., 174
Gheen, W. B., 1150
Gibbs, W. B., 962
Gibson, D. A., 1474
Gibson, J., 394
Giles, W. F., 1011
Gill, A. W., 1056
Given, William B., Jr., 260‡
Gleason, J. A., 576, 915*
Glosser, Wallace W., 911
Gofforth, E. G., 1149, 1252, 1426*
Goggin, Victor T., 1008
Goodman, F. T., 962
Goodrich, Dr. B. F., 172
Goodsell, J. O., 534
Goodwillie, E. E., 863
Goodwin, E. G., 1143
Goodwin, G. S., 394
Gordon, J. A., 576
- Gore, W. A., 309
Gorr, J. A., 576
Gorusch, C. B., 440
Gould, J. E., 440
Gracey, J. F., 869
Graham, J. B., 822
Grandy, A. L., 870
Grandy, H. L., 1012
Grant, Max, 437, 484*, 1295
Graves, A. D., 307, 389*
Gray, C. C., 576
Green, C. E., 1055
Green, F. W., 1149
Green, L. J., 964
Greenough, H. P., 1055
Greenwell, O. J., 394
Greer, B. B., 1055
Gregory, Richard, 1143
Griffeth, B. W., 964
Grigg, Frank N., 1008
Griggs, G. L., 1426
Groff, D. T., 1008
Groome, Peter, 220
Gruber, L. D., 488
Grundt, George H., 259
Guisey, H. M., 307
Gurley, F. G., 1012, 1426
Guthrie, L. A., 220
- Hackathorn, C. F., 863
Haire, C. C., 822
Haldeman, A. L., 1055
Hale, Arthur, 1183
Hall, W. B., 259
Halline, S., 957
Halstead, J., 963
Hambleton, A., 1056
Hamilton, C. L., 962
Hamilton, Frank H., 1474
Hammer, Belger H., 741
Hammill, Joseph A., 735
Hanley, J. P., 534
Hanley, W. S., 1150, 1196‡
Hansen, John M., 390
Harahan, W. J., 264
Hardin, C. M., 1094
Harding, T. F., 741
Harlan, James S., 715
Harper, Lawrence M., 306
Harris, T. E., 822
Harrison, G. A., 220
Hart, William F., 216*
Hartford, E. G., 742
Hartley, W. A., 1100
Hartley, W. D., 220
Harvey, F. H., 1149
Haskell, E. Kirk, 957
Hathaway, H. P., 576
Hatch, George W., 912
Hatch, Ralph T., 738, 819*
Hatten, E. K., 870
Hauck, A. B., 1375
Hauck, M. C., 1375
Hawkins, W. P., 394
Hawthorne, F. M., 964
Haydon, J. D., 173
Hayes, W. P., 822
Heidenrich, C. F., 1012
Heilbronner, E. G., 1099
Heimerdinger, W. E., 1056
Heingway, E. D., 962
Henry, E. L., 1195
Hensley, W. R., 220
Hermans, Alfred, 393, 440‡
Herrera, A., 870*
Hersh, J. B., 488
Hevron, D. B., 1099
Hewitt, J. W., 963
Hickey, D. W., 174, 916
Hickman, W. R., 1008
Hicks, Charles, 173, 576
Hicks, H. C., 869
Higgins, Samuel, 986*, 1049
Hilgartner, D. E., 961
Hillary, W. R., 964
Hilleary, Edgar D., 963*
Hillis, A. W., 1143
Hilton, A. C., 534, 741‡
Hinkle, R. J., 217‡
Hitch, C. B., 174
Hoff, Joseph S., 735
Hoffman, C. M., 1378
Hoffman, E. W., 1098
Hogan, J. L., 264
Holcomb, J. R., 916
Holdorf, W. H., 911
Holdrege, George W., 262*
Holland, Charles A., 1094
Hollinger, R. R., 264
Holmes, A. C., 1370
Holmgren, H. R., 352
Holst, E., 962
Honnold, F. C., 572
Hood, J. E., 1149
Hood, William, 1058, 1100, 1150*
Hooper, B. W., 986*, 1049
Hooper, H. H., 1150
Hoops, D. H., 1055*
Hoover, Herbert, 1045
Horn, J. M., 440
Hoskins, F. G., 961
Howard, E. G., 263
Howard, G. A., 576
Howard, J. H., 263*, 440
- Howard, W. G., 962
Howden, G. B., 174
Hoy, E. F., 352
Hoyle, N. C., 484
Hubbard, J. J., 1094
Hubbell, C. H., 1055
Hubbell, F. C., 1055
Hudson, B. H., 962
Hudson, E. E., 530*
Huffman, E. C., 1099
Huffman, R. S., 964
Hulatt, H., 352
Hull, H. B., 1056
Humble, R. F., 1474
Hume, J. C., 1301
Humphreys, W., 963, 1099‡
Hungerford, E. D., 1055
Hunt, C. A., 393
Hurkett, S. C., 1426
Hutchinson, F. L., 220
Hutchinson, J. B., 962
Hutchinson, J. E., 576
Hyland, John, 348, 1008
- Ilsley, J. P., 1051
Ingraham, Langley, 572
Inman, S. D., 484
Isbester, G. C., 640‡
- Jackson, C. T., 534, 576*, 964
Jackson, J. L., 348
Jackson, R. E., 310
James, C. M., 1196
James, V. C., 393
James, R. H., 1474
Jefferson, C. E., 1426
Jeffords, L. S., 220
Jenkins, W. D., 863
Jepson, Gunni, 819
Jewett, F. B., 1008*
Johns, C. W., 964
Johnson, A., 393
Johnson, Alba B., 390
Johnson, Arthur G., 1143
Johnson, E. N., 587
Johnson, H. W., 1378
Johnson, J. P., 1099
Johnson, L. E., 262*
Johnson, M. A., 259
Johnson, Robert B., 1049‡
Johnson, Sidney G., 1051, 1143
Johnson, V. M., 1012
Johnson, W. A., 310
Johnson, W. H., 1301
Johnston, P. W., 1196
Johnstone, Homer C., 1008
Jones, F. A., 742
Jones, F. W., 869
Jones, J. S., 1055, 1098
Jones, Paul, 962
Jones, Percy W., 1049
Jones, R. G., 964
Jones, R. J., 1143
Jouett, Edward S., 1055, 1098*
Joyce, P. H., 530
Jubell, E. S., 259
- Kadie, C. H., 1008
Kardos, E., 1471
Keate, J. F., 822
Keating, W. T., 963, 1099
Keenan, T. L., 962
Kellogg, D. P., 1378
Kellogg, E. D., 390‡
Kelly, D. H., 390
Kelly, John P., 1005*
Kemp, G. W., 962
Kendall, L. B., 1195
Kennedy, W. E., 576
Kern, H. F., 1099
Kerr, G. H., 963*
Kershner, W. P., 1150‡
Kimmel, E. L., 1012
Kincaid, Z. M., 916
King, R., 1098, 1195
King, W. H., Jr., 964, 1056, 1196‡
Kipp, A. V., 822
Kirkpatrick, D. F., 822
Kitchell, J. G., 393
Knapp, C. S., 352
Knapp, W. M., 263
Knickerbocker, W. B., 438
Knight, W. B., 742
Koehring, P. A., 438
Kothe, Charles A., 1375
Kreplin, E. A., 1422
Kress, H. H., 1375
Kruexer, A. J., 394
Kuehle, H. A., 437
Kuehner, A. T., 348
Kyle, M. T., 956*
Kyle, W. T., 912
- Lamb, G. W., 576, 741, 916
Lambert, J. A., 576
Lundin, D. M., 1196
Lund, B., Jr., 742
Lane, C. L., 390
Lane, E. M., 310
Lane, I. H., 440
Lane, R. Loh, 306
Lane, William T., 912
Lans, P. G., Jr., 1252, 1301*
Lanham, C. E., 1474
- Lanhan, C. E., 1098, 1195‡
Larimer, S., 534
Larmour, R. E., 1426
Larsen, Lewis A., 171*
Laughlin, Porter L., 216, 217*
Lavis, F., 171
Leamy, M. F., 309
Leas, R., 1056
Lebenbaum, Paul, 174, 220
Lee, A. E., 912
Lee, E. H., 693*
Lee, W. S., 1098
Leighton, Marshall O., 957‡
Lehman, F. A., 961, 962*
Le Laurin, E. G., 863
Lemley, John S., 171
Lenhart, L. A., 348
Leonard, P. H., 1301
Letts, P. R., 1422
Le Valley, John R., 259
Levenhagen, R. W., 259*
Lewis, E. I., 1049, 1091, 1141‡
Lewis, E. R., 440, 534‡
Lewis, F. E., 263, 488*
Lewis, H. M., 263
Lillis, D. F., 1295
Lilly, William, 863
Lindsay, D. F., 352
Lisle, M. E., 1471
Littlefair, G. E., 174
Livingston, H. T., 1056
Lloyd, A. E., 1098
Lloyd, E. E., 393
Long, Arthur F., 741
Longworth, W. I., 863
Lott, E. F., 915
Lowman, Harry F., 259, 530
Lowry, H. A., 264
Lovall, George R., 1098, 1195, 1241*
Lutz, J., 1375
Lynch, J. G., 1301
Lyon, H. D., 388*
Lyons, F. W., 1149
- McCartney, J. D., 534, 741*
McCauley, F. F., 916, 1195
McChord, J. H., 1195
McCormick, D. G., 488
McCrea, J. A., 961
McDonnell, M. E., 264
McDougal, J. A., 1055
McElroy, F., 962
McFarland, H. B., 742
McFarland, H. F., Jr., 310‡
McFartridge, A., 309
McGann, C. E., 440
McGhee, C. P., 963
McGraw, M. J., 440
McGraw, W. E., 1150
McGraw, J. A., 916, 964‡
McHugh, John, 217
McIntyre, F. W., 1051
McKean, A. T., 963
McMahon, F. J., 964
McMaster, H. W., 173
McMenimen, W. L., 986, 1049
McNaughton, R. A., 1252
McNeese, A. S., 393
McNeil, B. I., 393
McNeillie, J. K., 309
McPartland, M. B., 870
McPike, E. F., 534
McSweeney, E. J., 1301
Macdonald, A. E., 1098
Macdonell, H. E., 1426
MacGregor, J. B., 488
Mackay, C. D., 309, 352‡, 1098
Mackert, A. A., 390
Mackie, F. J., 1055
Madden, M. E., 1378
Magnus, F. G., 216
Mahaney, J. E., 1196, 1302‡
Maher, F. L., 962
Malott, C. M., 863
Mann, L. H., 1426
Mapother, Wible L., 800*
Mariner, A. G., 534
Markett, F. S., 440
Marsh, A. E., 309
Marsh, Howard H., 171*
Marshall, K. C., 1150
Marshall, Waldo H., 171
Masten, George, 309
Mathews, A. A., 1150
Mathewson, H. G., 1293
Maxwell, A. J., 173
Maxwell, F. A., 440
Mee, C. R., 1012, 1196‡
Mellor, C. L., 259
Mentzer, E. K., 742
Merritt, I. B., 534
Merritt, P. F., 437
Mervis, Meyer B., 1094
Messinger, Clifford S., 438
Metcalfe, F. M., 219, 220‡
Michael, C. F., 390
Mickle, J. R., 307
Middleton, A. A., 393
Miholland, Ernest, 530
Miholland, W. K., 530
Miller, A. A., 869, 962‡
Miller, G. R., 1099
Miller, H. W., 219
Miller, J. French, 572

- Miller, R. D., 1099
 Miller, R. E., 390
 Miller, Samuel F., 1056*
 Miller, Ward A., 1375
 Miniger, C. O., 390
 Mitchell, R. A., 216
 Modaff, H., 1099
 Monsces, S. H., 1471
 Monsorrat, Col. C. N., 1252
 Montgomery, H. C., 488
 Montgomery, T. B., 220, 310
 Moore, Charles, 534
 Moore, H. C., 1149
 Moore, William H., 1471
 Moorman, J. S., 220
 Moran, W. F., 1301
 Morgan, E. F., 309
 Morris, R. H., 174, 1012‡
 Morris, Thomas Y., 916
 Morrison, S., 174
 Morrison, S. A., 916, 1195
 Morrison, William, 1100
 Morrow, C. E., 1012
 Morrow, S. K., 216
 Morse, C. S., 963
 Morse, W. C., 915, 1011*
 Mosby, W., 1150
 Mountfort, E. L., 174
 Mudd, J. T., 1099
 Mulken, L. K., 869
 Mull, Howard C., 216
 Muller, E. F., 576
 Murray, E. A., 174
- Nash, E. E., 1378, 1425*
 Nay, Frank, 263*, 309
 Naylor, E. L., 1150
 Nelms, W. H. L., 1474
 Nelson, G. W., 174
 Nelson, R. M., 1196
 Newcomb, C. B., 822
 Newcomb, H. T., 741, 1149‡
 Newman, C. M., 1301
 Nightingale, J., 1295
 Noble, W. H., 1008
 Noriega, J. D., 1252
 Northcutt, W. A., 1195, 1252*
 Nugent, F., 394
 Nutt, H. C., 961, 1011*
 Nye, Ernest L., 957
 Nyquist, Carl, 1378*
- Oatley, Henry B., 531*
 O'Brien, Frank, 916, 1195
 O'Connor, A. F., 259
 Ognorn, W. H., 440, 487‡
 Ogg, O. J., 1055
 Olson, O. F., 1149
 Olds, F. S., 576
 O'Leary, J. W., 530
 Oliver, E. R., 393‡, 961‡
 Olson, B. C. H., 352
 O'Neal, Charles T., 1098‡
 Orbin, C. W., 1012
 Otto, Edmund, 438
 Outerbridge, Eugene H., 1001
 Overly, Charles F., 1295
 Overton, E. E., 1474
 Oviatt, E. E., 352
 Oviatt, Harry L., 437
 Owens, Roy G., 530, 1375
- Page, William H., 741
 Paist, H. N., 263, 487‡
 Paradise, T. E., 1099
 Parmelee, Arthur L., 309, 534‡
 Pascual, C. O'D., 1301
 Pastre, Harry A., 484
 Patt, F. M., 1055
 Patton, W. G., 1012
 Paul, J. J., 534
 Paulay, W. L., 1055
 Pearce, H. C., 964*, 1056, 1100
 Pearce, Walter D., 1055
 Pearson, R. L., 352
 Pease, F. N., 264
 Peck, D. R., 576
 Peck, E. A., 1098
 Peck, M. E., 1471
 Peers, A., 174, 394
 Pelter, F. P., 1378
 Perkins, C. D., 352
 Perkins, L. O., 1378
 Peter, William F., 1195
 Pettigrew, C. C., 1150
 Pittman, C. M., Jr., 1301
 Pollok, Allan, 173
 Pooley, William R., 1004
 Porter, A. H., 220
 Post, George A., 217, 259, 306*
 Potter, Mark W., 715
 Pounds, Lewis H., 1001
 Powers, R. T., 1056
 Prather, V. W., 216
 Pratt, George E., 348
- Pratt, H. M., 572
 Prehn, G. L., 962
 Prendergast, William A., 1004
 Prentice, A. L., 1012
 Preston, A. L., 1474
 Preston, R., 220
 Proctor, B. W., 1252, 1474‡
 Purdy, H. L., 440
 Purvis, H. W., 741
 Purvis, J., 962
 Pyne, R. A., 174
- Quinn, E. Y., Jr., 534
- Radans, C. F., 1098
 Raleigh, W. N., 1150
 Ramey, E. E., 264
 Rampacher, J. S., 393
 Ramsom, J. T., 1100
 Randall, R. B., 819
 Randolph, O. C. F., 1094
 Ranney, Garner, 352
 Ray, G. W., 440
 Ray, H. S., 1149, 1195*
 Reagan, John T., 259
 Reese, O. P., 964
 Reeves, Francis T., 530
 Regal, J. H., 869
 Regan, James S., 216
 Reid, Russell B., 1051
 Reigel, Fred S., 1099‡
 Renix, W. J., 174
 Reynolds, C. B., 962
 Reynolds, L. G., 534
 Rhodes, L. B., 530
 Rhodes, S. C., 534
 Richards, E., 1150
 Richardson, R. C., 253
 Richardson, C. A., 822
 Richardson, C. P., 1056
 Riddell, Walter H., 1183
 Ridlon, S. E., 174
 Riefel, F. F., 1098
 Riegel, F. S., 963
 Rieger, Charles J., 1474
 Ringling, John, 440
 Rittenhouse, J. A., 1100
 Rittmaster, M., 1012
 Robbins, Frank S., 1245‡
 Robbins, L. J., 962
 Roberts, T. A., 962
 Robieder, W. J., 220
 Robinson, D. H., 174
 Robinson, W. F., 1191
 Robinson, W. L., 264
 Rockwell, J. A., 1301
 Roebing, Col. Washington A., 1375
 Roehl, W. J., 530, 572*
 Rohman, H. D., 172
 Romney, D. S., 576
 Ross, J. H., 587
 Rosseter, F. S., 309, 1149
 Rourke, G. W., 1055
 Rouse, C. A., 1426
 Roussin, T. A., 1012
 Rowland, T. S., 1378
 Ruby, E. L., 1008
 Russell, Hilliard, 962
 Russell, Robert L., 961*
 Ryan, Allan A., 863
 Ryder, Gilbert E., 531*
- Sackbauer, F. P., 1012
 Sainsbury, C. E., 1195
 Salmon, H. W., Jr., 394
 Salyards, W. E., 1149
 Sanborn, Robert P., 484
 Sasser, J. W., 310
 Sattley, E. C., 912, 1143
 Saunders, A. G., 394
 Saunders, H. R., 1055
 Sawyer, D. E., 216
 Sawyer, M., 1195
 Scannell, W. W., 352
 Scannell, A. T., 438
 Schantl, H., 1012, 1056‡
 Scheer, E. W., 961, 1011‡
 Schneider, Charles Prosper Eugene, 1367
 Schorr, P., 1474
 Schram, I. H., 1252
 Schumacher, T. M., 863
 Scott, Geo. E., 572
 Scott, J. W., 738
 Seaman, J. C., 1100
 Seargeant, M., 173
 Sedgwick, E. V., 572
 Sedgwick, F. W., 1195
 Seiberling, F. A., 1247
 Seim, J. H., 964
 Semon, R. C., 822
 Semple, Charles D., 174
 Semple, Oliver C., 1004
 Sevier, C. J., 394
 Sexton, J. R., 964
- Seymour, John B., 216*, 217, 1422
 Shannon, O. L., 264
 Shaughnessy, E. H., 946‡, 993*
 Shaver, A. G., 171
 Shaver, J. D., 348
 Shaw, J. H., 1474
 Shearman, O. R., 530
 Sheehan, F. E., 1008
 Sheldon, Charles H., 259
 Shelton, T. J., 962
 Shepard, R. L., 1094
 Shepherd, P. L., 1150
 Sherman, I. B., 1195
 Sherman, J. K., 964
 Shreve, E. A., 534
 Shriver, Charles M., 1301*
 Sidey, W. J., 1252
 Simpson, W. D., 742
 Sisson, F. P., 964
 Skinner, D. P., 1195
 Slimer, F. J., 1474
 Small, J. W., 870*
 Smith, Alfred E., 1001
 Smith, B. H., 1056
 Smith, Edward G., 173‡
 Smith, H. E., 438
 Smith, J. Allan, 390
 Smith, Sidney, 1195
 Snead, R. H., 962
 Snedeker, J. E., 174
 Sostheim, Will R., 1422
 Soule, A. L., 1055
 Soule, U. G., 1056
 Sowle, C. W., 173
 Speigle, J. F., 964
 Spencer, Frank N., 1474
 Spencer, J. Brookes, 819‡
 Sprague, Charles J., 734
 Sproule, C. D., 307
 Stafford, Harry B., 171, 1247
 Stauffer, H. C., 962, 1012*
 Stebbins, F. G., 263
 Stegner, E. J., 264
 Stein, A. H., 1375
 Steinman, D. B., 1143
 Steinmetz, C. M., 587
 Stephens, H. H., 220
 Sterling, Paul, 352
 Stevens, Col. John F., 1289
 Stewart, R. D., 916
 Stoltz, A. G., 390
 Stolz, J., 1100
 Stone, F., 440
 Stone, G. M., 1056
 Stone, Henry L., 916, 1055, 1098*
 Strachan, W. G., 964
 Straub, W. C., 172
 Street, Clement F., 1247
 Strips, W. C., 1295
 Strom, C. L., 1195
 Sturges, Norman D., 1052
 Sturgis, C. L., 1378*
 Sturrock, A., 174, 310‡
 Stuvort, J. T., 534
 Summers, E. J., 870
 Swaim, J. H., 1056
 Swain, W. W., 1474
 Swan, Arthur W., 1471
 Swan, C. M., 1012
 Swan, John J., 1094
- Talbot, C. G., 216
 Talcott, F. L., 916
 Tallaksen, G. H., 216
 Tallman, E. J., 962
 Tate, F. F., 1056
 Tate, S. M., 534
 Taylor, E. S., 262
 Taylor, G. Lewis, 389
 Taylor, H. S., 534
 Taylor, Roger T., 1055
 Taylor, T. C., 264
 Tebbetts, George E., 216
 Temple, C. H., 174
 Templeton, J. N., 963, 1099
 Thiehoff, W. F., 173‡
 Thomas, J. F., 488
 Thompson, D. W., 915
 Thomure, F. J., 1012
 Thrall, H. P., 1099
 Throne, M. S., 962
 Thwaites, E., 1098
 Tinsman, F. N., 1055
 Tocher, J. P., 963, 1099
 Todd, E. N., 916
 Todd, H. E., 220
 Todd, J. H., 576
 Tollerton, W. J., 429
 Tompkins, H. S., 1471
 Topping, N. B., 822
 Torney, Harry W., 1471
 Treandly, G. J., 1422
 Trexler, L. J., 310
 Sevier, C. J., 394
 Trigg, T. E., 961
- Trovillion, Robert A., 1301*
 True, Charles H., 531*
 Turnbull, R. J., 264
 Turner, H. D., 1100
 Turner, W. T., 963
 Tuttle, J., 870
 Twyman, C. L., 1378
- Umshler, A. M., 961
 Urbutt, C. F., 440
 Urwin, R. W., 393
- Van Bergen, W. F., 174
 Vanderblue, F. J., 576, 741
 Vandiver, W. K., 816
 Van Hecke, D., 1055
 Van Schaick, A. P., 912, 956*
 Van Voorhis, Charles, 1004
 Vaughan, D. W., 310
 Vaughan, Lloyd R., 916
 Veitch, A. O., 173, 488‡, 1195
 Vroman, F. C., 964
- Wachter, James M., 1011‡
 Wagner, F. W., 389
 Wagner, V. B., 916
 Wait, B. A., 1056
 Walker, A. E., 1055
 Walker, C. E., 172
 Walker, Charles H., 220
 Walker, Edmund H., 217, 259*
 Wallace, John F., 567
 Walsh, J. M., 1378
 Walton, P. G., 741
 Wardrop, W. M., 309
 Warren, W. E., 1055
 Waterman, C. H., 916
 Watson, H. W., 1474
 Wear, F., 1098
 Webb, A. H., 174
 Webb, W. A., 1149
 Webster, J. H., 534, 741, 869
 Wehl, A. C., 216
 Welch, L. H., 962
 Weller, Robert C., 530
 Werns, J. A., 220
 Wescott, William P., 572
 Weston, A. H., 1051
 Wharton, J. E., 310
 Wharton, W. H., 264‡
 Wheaton, F. L., 1252
 Wheeler, F. S., 1196
 Whitcomb, F. E., 738
 Whitcomb, L. L., 1100
 White, Charles H., 956
 White, J. G., 1471
 White, James W., 348
 White, R. B., 961
 White, R. C., 174
 White, W. L., 263‡
 Whitney, G. C., 264
 Whittington, A. G., 1149
 Wildman, C. B., 174
 Wilkes, J. L., 534, 741‡
 Wilkins, Frederick Hayes, 1143
 Williams, A. D., 962
 Williams, D. F., 869
 Williams, G., 352
 Williams, H. A., 1378
 Williams, John P., 1055
 Williams, Sir Thomas, 258
 Williams, W. R., 1293
 Willson, O. H., 734
 Wilmer, E. D., 1247
 Wilmot, H. V., 393
 Wilson, F. H., 1098
 Wilson, Robert B. M., 912
 Wilson, William C., 530
 Winans, B. H., 962
 Windes, T. G., Jr., 1375
 Wolf, Albert M., 306
 Wolfe, E. W., 912
 Wolfel, Paul L., 389
 Wood, A. C., 572
 Woodings, Emanuel, 171, 216, 217*
 Woods, W. P., 216
 Woodward, Ernest, 1195
 Woodley, Robert W., 715
 Work, B. G., 172
 Wright, O. C., 964
 Wright, P. A., 963
 Wycke, T. J., 870
 Wyeth, Ross, 172
- Yard, George N., 916, 1301, 1426‡
 Yohe, J. B., 961
 Young, C. L., 1426
 Young, Joseph H., 1027*
 Young, N. H., 1011, 1426
 Young, O. F., 1055
- Zanone, J. A., 1378
 Zymour, John B., 171

OBITUARY

- Anderson, H. L., 822
- Bennett, B. H., 1150, 1474
 Blake, E. M., 216, 348*
 Boutet, Henry, 1150
 Braine, Lawrence F., 1247‡
 Brigham, E. D., 742*
 Brown, Edward L., 1252*
- Buckley, James, 352, 534
 Bush, David L., 264*
- Candee, Willard L., 1052*
 Caton, William Jordan, 1471‡
 Coapman, Eugene H., 174‡, 219
 Coleman, William M., 310
 Constans, Oscar A., 742*, 822
- Cox, Charles H., 870
 Crosley, E. B., 916‡
- Daly, John W., 220
 Davis, Frank H., 1100
 Davison, William Henry, 1196‡
 Donald, F. C., 440, 488*
- Draper, E. S., 440‡, 742
 Du Pont, Alexis L., 1295
- Ellis, Clifford J., 390*
- Flynn, John J., 307‡
 Foran, George Jesse, 1191‡
 French, Lester G., 1012‡

OBITUARY—Continued

Given, William H., 1474†
Gunsaulus, Dr. Frank W., 745

Haugan, H. G., 352
Hedge, C. G., 576
Hiden, Henry, 394, 483
Hillard, C. W., 576*
Horr, George B., 1195
Houghton, Henry F., 310
Howard, Elmer A., 1100*

Johnson, Arthur H., 483†
Johnson, Lucius E., 394

Keegan, J. F., 916†
King, Coleman, 1474
Kirkman, M. M., 1012†

Korty, L. H., 1196†
Kuykendall, A. L., 1378

Lane, Franklin K., 1196†
Ledyard, Henry B., 1252, 1302*
Lister, F. A., 870†

McCaughy, Frank P., 484
McDonnell, F. V., 1056
Marsh, Harry L., 260*
Marshall, E. C. D., 1252, 1301
Mills, Ira B., 1090
Molchior, W. H., 174
Monell, Ambrose, 1094†
Moore, Joseph W., 1100†
Morse, Charles H., 1143*
Moule, W. J., 352, 393
Mulligan, J. W., 1056, 1150†, 1195

Nelson, Joseph E., 307*

Orr, Thomas M., 870

Parker, Rolla J., 916*
Perkins, Robert C., 1196†
Phillips, W. E., 1056
Pifer, C. W., 1100†
Pilson, Raymond H., 438
Porter, H. K., 957*
Priestley, Neville, 257
Pyne, M. T., 1056†

Renick, H. E., 822
Rhodes, Louis B., 348
Robinson, William, 172†

Roebing, Karl G., 1295, 1375
Rugg, F. M., 1302, 1378

Sattley, R. C., 220*
Sayre, William H., 217†
Schoenmehl, C. B., 438, 485*, 530
Shrimpton, F. E., 534, 741
Smith, M. H., 488, 515*, 800
Snedden, James Prentice, 1422

Taylor, Z. V., 1056†, 1098
Thomas, Benjamin, 310
Torbert, A. C., 870†, 916

Walker, J. G., 576
Warden, W. F., 348
Williams, Henry R., 1426*
Williams, Sydney, 310†

RAILWAY CONSTRUCTION

Ahukini Terminal & Railway Company, 437
Ann Arbor, 218, 737
Atchison, Topeka & Santa Fe, 218, 308, 349,
390, 437, 485, 532, 574, 821, 864, 958,
1052, 1192, 1295, 1374, 1470
Atlanta & St. Andrews Bay, 218
Atlantic Coast Line, 349

Baltimore & Ohio, 532, 1052

Canadian National, 958
Carolina, Clinchfield & Ohio, 349
Central of Georgia, 737, 1093
Chesapeake & Ohio, 218, 1144
Chicago & Alton, 308
Chicago & Eastern Illinois, 1422
Chicago & Illinois Midland, 1470
Chicago & North Western, 821, 1052, 1144
Chicago & St. Louis, 349, 532, 737, 958
Chicago & Burlington & Quincy, 349, 1295, 1422
Chicago Great Western, 1093
Chicago, Milwaukee & St. Paul, 864
Chicago, Rock Island & Pacific, 261, 1093, 1246,
1374, 1422
Chicago Union Station, 308, 391, 437, 532, 574,
821, 864, 958, 1052, 1093, 1144, 1192,
1246, 1295, 1422
Cleveland, Cincinnati, Chicago & St. Louis, 349,
Coon Bayou & Arkansas City, 308

Delaware, Lackawanna & Western, 308
Detroit & Ironton, 1246
Detroit-Toledo Shore Line, 1295
Duluth & Iron Range, 218

Esquimalt & Nanaimo, 485

Fort Worth & Denver City, 218

Golden Belt, 218
Grand Trunk, 1093
Great Northern, 308, 349, 437
Green Bay & Western, 864
Gulf Coast Lines, 308

Illinois Central, 218, 391, 485, 532, 574, 821,
864, 958, 1052, 1093, 1144, 1192, 1246,
1295, 1374, 1422
International & Great Northern, 1422
Interstate, 532, 958

Jefferson & Northwestern, 532

Kansas & Oklahoma, 308
Kentucky & Tennessee, 532, 1093

Live Oak, Perry & Gulf, 485
Long Island, 864
Louisiana & Arkansas, 1093
Louisville & Nashville, 218, 308, 437, 485, 1144,
1374, 1422

Maine Central, 1052
Minneapolis, Northfield & Southern, 261
Minneapolis, St. Paul & Sault Ste. Marie, 437
Missouri, Kansas & Texas, 218, 261, 349, 437,
485
Missouri Pacific, 574, 1295, 1374
Montana Railroad, 532, 574
Morgantown & Wheeling, 218
Mt. Streeter, 485

Nashville, Tenn., 1295
New York City, 1192
New York, New Haven & Hartford, 1144

Northern Pacific, 737
Northwestern Pacific, 391

Oklahoma-Southwestern, 864
Oregon Short Line, 437, 821

Pacific Fruit Express, 532
Patterson & Western, 391
Pere Marquette, 261
Philadelphia, Newton & New York, 737
Pittsburgh & West Virginia, 1093, 1246, 1422
Potato Creek, 218

Red River Valley, 391

St. Louis-San Francisco, 574, 864
St. Louis-Southwestern, 1192
San Antonio & Aransas Pass, 574, 1374
Seboomook Lake & St. John, 958
Sierra Railway of California, 1246
Southern Pacific, 391, 485, 1144
Spokane & British Columbia, 958

Tennessee, 261
Texas & New Orleans, 261
Texas & Pacific, 532, 958, 1144
Texas Midland, 218, 1052, 1246
Toledo, St. Louis & Western, 532
Toronto, Hamilton & Buffalo, 261
Utah Railway, 308, 1192
Union Pacific, 261, 821, 864, 1093, 1144, 1295,
Uvalde & Northern, 574, 1144, 1192

Wabash, 261, 1192, 1295, 1374
Western Maryland, 349
Western Pacific, 261, 485
Wichita Falls & Southern, 574

FINANCIAL NEWS

Akron, Canton & Youngstown, 261
Alabama & Vicksburg, 350, 574, 821
Alabama, Florida & Gulf, 739
Alabama Great Southern, 1247
Alabama, Tennessee & Northern, 308, 350
Alaska Anthracite Railroad, 1053, 1296
Ann Arbor, 218, 261, 486, 865
Atchison, Topeka & Santa Fe, 172, 350, 913,
1053, 1095, 1376
Atlanta, Birmingham & Atlantic, 532
Atlantic Coast Line, 1192

Baltimore & Ohio, 172, 308, 350, 391, 486, 913,
1296, 1376
Bangor & Aroostook, 218, 1095
Belt Railway of Chicago, 958, 1009
Bergen County, 574, 913
Birmingham, Selma & Mobile, 350
Boston & Maine, 172, 739, 958, 1009, 1053,
1192, 1424
Boston, Cape Cod & New York Canal Company,
1296
Boyne City, Gaylord & Alpena, 218, 439
Buffalo, Rochester & Pittsburgh, 172, 350, 574,
958, 1247

Cambria & Indiana, 1471
Canadian National Railways, 865
Canadian Pacific, 486, 865, 1095, 1144
Cape Girardeau Northern, 958
Carolina, Clinchfield & Ohio, 172
Central & Gulf, 350
Central of Georgia, 172, 308, 350
Central of New Jersey, 439, 574, 1376
Central Railroad of South Carolina, 1471
Central Vermont, 1009, 1095, 1424
Central Wisconsin, 350
Charles City Western, 1376

Chesapeake & Ohio, 218, 350, 391, 739, 1053,
1192, 1247, 1471

Chicago & Alton, 172, 1009
Chicago & Eastern Illinois, 218, 261, 391, 532,
865, 913, 1095, 1471

Chicago & Illinois Western, 739
Chicago & Illinois Midland, 821
Chicago & North Western, 261, 391, 486, 574,
739, 913, 959, 1009, 1192, 1296
Chicago & Western Indiana, 308, 959, 1095, 1296
Chicago, Burlington & Quincy, 391, 532, 821,
958, 1053, 1095, 1144, 1296

Chicago Great Western, 913, 1009
Chicago, Indianapolis & Louisville, 350, 865, 958,
1471

Chicago Junction Railway, 739, 913, 959, 1247
Chicago, Milwaukee & St. Paul, 308, 350, 391,
486, 574, 913, 1053, 1095, 1192, 1471

Chicago, Rock Island & Pacific, 391, 574, 739,
959, 1144, 1247, 1296, 1376

Chicago, St. Paul, Minneapolis & Omaha, 172,
439, 1009, 1296, 1424

Chicago, Terre Haute & Southeastern, 391, 1192,
1376

Chicago Union Station Company, 1296, 1471
Cincinnati, New Orleans & Texas Pacific, 172,
1192

Cleveland, Cincinnati, Chicago & St. Louis, 350,
532, 739, 865, 1009, 1095, 1376
Cleveland Union Terminals Company, 486

Collins & Ludowici, 486
Colorado & Southern, 1296
Columbus & Greenville, 1424
Cumberland & Manchester, 1192, 1297

Davton Toledo & Chicago, 486

Death Valley, 1424

Delaware & Hudson, 439, 1192
Delaware, Lackawanna & Western, 392, 486,
1095, 1192, 1247, 1471
Denver & Rio Grande, 261, 350, 392, 532, 574,
739, 865, 914, 1096, 1193, 1248, 1297,
1471

Denver & Rio Grande Western, 1053, 1297
Detroit & Ironton, 1242
Detroit, Toledo & Ironton, 1009, 1424
Duluth & Iron Range, 1096
Duluth, Missabe & Northern, 1096

East St. Louis Junction, 1096
Elberton & Eastern, 350
Electric Short Line, 392
El Paso & Southwestern, 261, 865, 1297
Eric, 532, 866, 959
Eureka Nevada, 914
Evansville, Indianapolis & Terre Haute, 866,
1096, 1193, 1376

Federal Valley, 218
Fernwood, Columbia & Gulf, 1053
Flemingsburg & Northern, 350
Flint Belt, 1472
Fonda, Johnson & Gloversville, 914
Fort Dodge, Des Moines & Southern, 866
Fort Smith & Western, 350, 392, 1297
Fredericksburg & Northern, 172, 1053

Gainesville Midland, 574
Georgia & Florida, 392, 866, 914
Georgia Northern, 350
Golden Belt, 914
Grand Trunk, 261, 959, 1096, 1193, 1248, 1376
Great Northern, 439, 1472
Greene County, 350

Gulf Ports Terminal Co., 959
Gulf, Texas & Western, 486

Hampden Railroad, 821
Hartwell Railway, 739
Hawkinsville & Florida Southern, 1248
Hocking Valley, 262, 350, 439, 1193, 1248, 1472
Houston & Brazos Valley, 914
Huntingdon & Broad Top Mountain, 218, 308, 1297, 1472

Illinois Central, 350, 439, 821, 1472
Illinois Southern, 173, 439
Indiana Harbor Belt, 308, 350, 392, 486, 739
International & Great Northern, 350, 486
Interstate Railroad, 1009, 1193

Kansas City Southern, 1193, 1424
Kansas City Terminal, 1096
Kansas, Oklahoma & Gulf, 262
Kinder & North Western, 1053
Knoxville, Sevierville & Eastern, 486
Lake Erie, Franklin & Clarion, 739

Lehigh & Hudson River, 218
Lehigh & New England, 1144
Lehigh Valley, 309, 532, 739, 1097, 1144, 1472
Little Rock & Argenta, 1144
Long Island, 392, 1376
Los Angeles & Salt Lake, 1053, 1193, 1248
Louisiana & Arkansas, 739
Louisville & Jeffersonville Bridge, 392
Louisville & Nashville, 392, 486, 533, 739, 914, 959, 1096, 1472

Mahoning Coal Railroad, 1424
Maine Central, 262, 392, 739, 821, 1193
Marion & Rye Valley, 218, 350
Marshall & East Texas, 914, 1472
Mason City & Ft. Dodge, 1376
Michigan Central, 173, 392, 1248
Minneapolis & St. Louis, 262, 486, 914
Minneapolis, St. Paul & Sault Ste. Marie, 392, 821, 1145, 1297
Missouri-Illinois, 439, 486, 739, 1297
Missouri, Kansas & Oklahoma, 1097
Missouri, Kansas & Texas, 439, 1193, 1376, 1472
Missouri Pacific, 262, 309, 486, 739, 1145, 1193, 1472
Mobile & Ohio, 439
Monongahela, 1472
Monongahela Connecting, 739

Moore Haven & Clewiston, 218
Muskegon Railway & Navigation Co., 1097

Nashville, Chattanooga & St. Louis, 218, 439, 739, 959, 1193, 1194
National Railways of Mexico, 822
New Orleans, Texas & Mexico, 392, 740, 1248
New York Central, 173, 350, 392, 486, 914, 959, 1248
New York, Chicago & St. Louis, 740, 1145
New York Connecting, 740
New York, New Haven & Hartford, 740, 822, 866, 1110, 1472
New York, Ontario & Western, 1054
Norfolk & Western, 351, 914, 1110, 1376
Norfolk & Portsmouth Belt, 575
Norfolk Southern, 439, 486, 1145
Northern Pacific, 351, 486, 575, 1472
Norwood & St. Lawrence, 740, 1376

Ocean Shore, 1473
Oregon, California & Eastern, 1110
Oregon-Washington Railroad & Navigation Company, 351

Panhandle & Santa Fe, 351
Paris-Orleans Railroad, France, 392
Patterson & Western, 1473
Pearl River Valley, 439, 1473
Pennsylvania, 219, 309, 351, 392, 533, 575, 1054, 1097, 1248, 1376, 1473
Peoria & Fekin Union, 173, 351, 533
Pere Marquette, 1110, 1145, 1376
Philadelphia & Reading, 351
Pickens Railroad, 392
Pittsburgh & Lake Erie, 219, 392, 439
Pittsburgh & Shawmut, 822
Pittsburgh & West Virginia, 1145
Pittsburgh, Cincinnati, Chicago & St. Louis, 1473
Pittsburgh, Shawmut & Northern, 1473
Portland, Astoria & Pacific, 351
Port Wentworth Terminal Corporation, 740

Raritan River, 351, 393, 740
Reading Company, 439, 487, 533, 575, 740, 822, 866, 960, 1097, 1194, 1248, 1297, 1377, 1424, 1473
Rennselaer & Saratoga, 914, 1054
Richmond Terminal, 219, 351, 866
Rock Island Southern, 393
Rutland Railroad, 1097

Sacramento Northern, 262
St. Louis-San Francisco, 533, 575, 1249, 1377, 1424
St. Louis Southwestern, 1097
St. Paul & Kansas City Short Line, 533
Sacramento Northern, 866
Salt Lake & Utah, 1424
Savannah & Atlanta, 575
Seaboard Air Line, 393, 533, 575, 740, 914
Southeastern Express Company, 487
Southern, 219, 262, 309, 439, 533, 1377
Southern Pacific, 1194
Southern Railway, 1194
Springfield Terminal, 1145

Tennessee, Alabama & Georgia, 1249
Tennessee Central, 173, 960, 1249, 1424
Terminal Railroad Association of St. Louis, 1377, 1473
Texas City Terminal, 533, 866
Texas Midland, 533, 1054
Texas Short Line, 1110
Toledo, Peoria & Western, 1097
Toledo, St. Louis & Western, 1054, 1110, 1194
Toledo Terminal, 866
Tonopah & Goldfield, 1377

Union Pacific, 351, 393, 1249, 1297, 1377

Valdosta, Moultrie & Western, 351, 575, 914, 960, 1110, 1194
Virginian, 1424
Virginia Blue Ridge, 866
Virginia Southern, 351, 393

Wabash, 1054, 1145, 1249
Washington & Choctaw, 575
Washington & Lincoln, 533
Waterloo, Cedar Falls & Northern, 219, 960
West Jersey & Seashore, 740
Western Allegheny, 351
Western Maryland, 219, 262, 351, 487, 575, 740
Western Pacific, 866, 914, 960, 1110, 1249, 1297, 1473
West Side Belt, 1145
Wheeling & Lake Erie, 219, 393, 533, 915, 1110
Wichita Falls & Northwestern, 262, 351, 960, 1194
Wichita Northwestern, 1377, 1424
Williamsport & North Branch, 575, 1249
Wilmington, Brunswick & Southern, 219, 262, 822
Wisconsin & Northern, 351, 439, 822, 1145